CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, November 11, 1909.

CONTENTS.

CONSTRUCTION NEWS:
Plans and Specifications on File..... 165
List of Contracts Pending..... 165
Railways 165
Electric Railways 166
Light and Power Plants..... 166
Bridges 167
Buildings 167
Water Supply and Irrigation..... 169
Sewerage 170
Streets and Roads..... 170
Manufacturing Plants 171
Miscellaneous Contracts 172
PROPOSALS 172

CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
11-16*	Steel pipe, Toronto, Ont.	(S.)10-28
11-20	Dredging, Charleston, S. C.	(S.)10-21
11-20	Generating set, Wash., D. C.	(S.)10-21
11-27	Pneumatic system, Charleston, S. C.	(S.)10-28
11-27	Seawall, N. Chicago, Ill.	(S.)11- 4
11-27	Roads, walks, N. Chicago, Ill.	(S.)11- 4
11-27	Jetty work, Dallas, Tex.	(S.)11-11
12- 1*	Heating, ventilating, New Zealand	(P. & S.) 9- 9
12- 4	Storage-house, Boston, Mass.	(S.)11-11
1-17*	Irrigation, Porto Rico	(P. & S.)10-21
1-18	Dry-dock, New York	(S.)10-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

11-11	Condenser apparatus, Galveston, Tex.	11-11
11-15	Lighting streets, San Diego, Cal.	10-28
11-15*	Electric fixtures, West Point, N. Y.	11- 4
11-17	Lighting, etc., Frankfort, Ky.	11- 4
11-20	Generating set, Wash., D. C.	10-21
11-22	Lighting fixtures, New York	11-11
11-26	Lighting system, Council Bluffs, Iowa	11- 4
12- 1	Electric work, Portland, Me.	11-11
12- 1	Boilers, Montreal, Que.	11-11
12- 6*	Pumps, Hull, Que.	11-11
12-18	Power plant, San Francisco, Cal.	11-11

BRIDGES.

11-11	Bridge, Indiana, Pa.	11-11
11-11	Bridge, Holton, Kan.	11-11
11-12	Substructures, etc., McCook, Neb.	11- 4
11-12	Bridge, Vancouver, B. C.	10-28
11-13	Bridge, Lawrence, Kan.	11-11
11-13	Bridge, Cumberland, Va.	11-11
11-15	Bridge, Danville, Ind.	11-11
11-15	Bridge work, Quebec, Que.	11- 4
11-16	Bridges, Aberdeen, S. Dak.	10-28
11-16	Bridges, La Moure, N. Dak.	10-21
11-16	Substructure, Cleveland, Ohio	10-28
11-18	Substructure, Cleveland, Ohio	11-11
11-19	Bridge, Cincinnati, Ohio	10-28
11-22	Bridge bonds, Spokane, Wash.	10-21
11-22*	Bridge, New Haven, Conn.	11-11
11-29	Bridge, Batavia, Ill.	11- 4
11-30	Substructure, Quebec, Que.	11- 4

BUILDINGS.

11-12	Cottage, Bedford, N. Y.	10-28
11-13	School, Louisville, Ky.	11-11
11-15	Bank, Kane, Pa.	11-11
11-15	School, Washington, D. C.	11-11
11-15	Bldgs., Ft. Washington, Md.	10-28
11-15	Prison, Columbus, Ohio	10-28
11-15	Quarters, Columbus Barracks, O.	10-28
11-15*	Post-office, New Haven, Conn.	10-21
11-15	Building, Tallahassee, Fla.	11- 4
11-15	Fire stations, New York	11- 4
11-15	Heating, etc., New York	11- 4
11-16	Court-house, jail, Gastonia, N. C.	11- 4
11-16*	Bakery, Ft. Du Pont, Del. (Mfg. Pl.)	10-27
11-16*	Post-office, Belleville, Ill.	10-14
11-16	Stable, Ft. McPherson, Ga.	10-28
11-17	Bakery, Ft. Missoula, Mont. (Mfg. Pl.)	10-28
11-17	Piping, Rochester, N. Y.	11-11
11-18	Jail, New York	11-11
11-18	Quarters, Ft. Wayne, Mich.	10-28
11-18	Post-office, Rock Island, Ill.	10-28
11-18	Barracks, Philadelphia, Pa.	10-28
11-19	Court-house, New Haven, Conn.	10-28
11-20	Plans, Hartford, Conn.	10-28
11-20*	Quarters, Ft. Douglas, Utah	10-21
11-20	Plans, Stamford, Conn.	11-11
11-22	Post-office, Toronto, Ont.	11-11
11-22*	Hospital, Ft. Terry, N. Y.	10-28
11-22	Plumbing, etc., New York	11-11
11-23	Lumber, etc., New York	11-11
11-23	Heating, New York	11-11
11-24	Post-office, Montgomery, Ala.	10-28
11-24	Bakery, Boise Barracks, Idaho (Mfg. Pl.)	11- 4
11-24	Building, Greenville, Ohio	11-11
11-26	Building, Columbus Barracks, O.	11-11
11-26	Heating, etc., Council Bluffs, Ia.	10-28
12- 1*	Heating, ventilating, New Zealand	9- 9
12- 1*	Capitol, Little Rock, Ark.	10-21
12- 1	Barracks, Ft. Riley, Kan.	11-11
12- 2	Post-office, New Brunswick, N. J.	10-28
12- 4	Storage house, Boston, Mass.	11-11
12- 6	Post-office, Hot Springs, Ark.	11-11
12- 6*	Quarters, etc., Ft. Meade, S. Dak.	11- 4
12- 9	Post-office, Oklahoma City Okla.	11-11
12-10*	Quarters, Ft. Morgan, Ala.	11-11
12-15*	Post-office, Davenport, Ia.	11-11

WATER-WORKS.

11-15*	Canal, Palisade, Colo.	11- 4
11-15*	Dam, Clifton, Colo.	10-28
11-15	Pumps, Fort McIntosh, Tex.	11- 4
11-15*	Gate-house, Newburgh, N. Y.	10-28
11-15*	Water system, Cincinnati, Ohio.	10-14
11-17*	Test borings, New York	11- 4
11-17	Mains, Brooklyn, N. Y.	11- 4
11-17	Water piping, Rochester, N. Y.	11-11
11-18*	Boilers, Grand Rapids, Mich.	11- 4
11-19*	Pump-house, Fort Hancock, N. J.	10-21
11-22	Water bonds, Spokane, Wash.	11- 4
11-24*	Dikes, New York	11- 4
11-24*	Headworks, New York	11-11
11-27	Pipe system, Charleston, S. C.	11- 4
11-30	Water system, Cathlame, Wash.	11-11
12-15	Standpipe, Belden, Neb.	11-11
1- 1	Water-works, Foley, Minn.	11-11

SEWERS.

11-15	Sewer system, Fort Ward, Wash.	11- 4
11-15	Sewer bonds, Louisville, Ohio	10-21
11-15	Sewer, Montreal, Que.	11-11
11-15	Sewers, Oklahoma City, Okla.	11-11
11-15	Sewers, Ada, Okla.	11-11
11-15	Sewers, Chicago, Ill.	11-11
11-16	Sewer, Gary, Ind.	11-11
11-16	Sewer, Akron, Ohio	11-11
11-16	Sewers, Toledo, Ohio	11-11
11-16*	Sewer, Summit, N. J.	11-11
11-16*	Sewers, E. Providence, R. I.	10-28
11-16	Sewers, Minneapolis, Kan.	11- 4
11-17	Sewer work, Morristown, N. J.	11-11
11-18	Sewers, Dunnville, Ont.	11- 4
11-19*	Sewer extensions, Roselle Park, N. J.	10-28
11-22	Sewers, Salem, S. Dak.	11- 4
11-24	Sewer, Brooklyn, N. Y.	11-11
11-26	Sewers, Denver, Colo.	11-11
11-26*	Sewer, Louisville, Ky.	11-11
11-29	Sewers, Traer, Iowa	11-11
12- 1	Laterals, etc., Vancouver Barracks, Wash.	11-11
12- 6	Sewer System, Greenfield, Ind.	11-11

STREETS AND ROADS.

11-12	Pavement, Alva, Ohio	11- 4
11-13	R'ds, etc., Ft. Leavenworth, Kan.	11-11
11-15	Sidewalks, Lake Providence, La.	11-11
11-15	Grading, etc., Lawrence, Kan.	11-11
11-15	Paving, Lincoln, Neb.	11-11
11-15	Paving, Oklahoma City, Okla.	11-11
11-15	Macadam, Bristol, Tenn.	11- 4
11-16	Road, Flemington, N. J.	11- 4
11-16	Highway, Chandler, Okla.	10-28
11-16*	Subways, paving, Auburn, N. Y.	10-28
11-16	Macadam, etc., Oakley, Ohio	11-11
11-16	Paving, etc., Danville, Ill.	11-11
11-17	Sidewalks, Roanoke, Va.	11-11
11-17	Paving, etc., New York	11- 4
11-18*	Highways, New York	11- 4
11-18	Paving, Pittsburg, Pa.	11-11
11-18	Paving, Toledo, Ohio	11-11
11-18	Gravel road, Ft. Benj. Harrison, Ind.	11-11
11-19	Paving, etc., Denver, Colo.	11- 4
11-19	Paving, Two Rivers, Wis.	10-21
11-22	Sidewalks, Wabash, Ind.	11-11
11-22	Paving, New York	11-11
11-23	Paving, St. Clairsville, Ohio	11-11
11-23*	Paving, etc., Paducah, Ky.	11- 4
11-24	Streets, Columbus, Ohio	11-11
11-24	Paving, New York	11-11
11-27	Macadam, etc., N. Chicago, Ill.	11-11
11-27	Pavement, etc., Omaha, Neb.	11-11
12- 6	Roads, Tipton, Ind.	11-11

MISCELLANEOUS.

11-13*	Ditch, Clinton, Ill.	10-28
11-15*	Machinery, Cincinnati, Ohio	10-21
11-15*	Dam, Clifton, Colo.	10-28
11-15	Filling in, Olympia, Wash.	11- 4
11-15	Ditches, levees, Auburn, Neb.	11-11
11-16	Dam, Burleigh Falls, Ont.	11- 4
11-17	Cement, New York	11- 4
11-18	Masonry repairs, New York	11- 4
11-18	Drip pans, New York	11-11
11-18	Granite steps, New York	11-11
11-19	Hook & ladder trucks, New York	11-11
11-20	Drainage canal, Timberville, Miss.	11- 4
11-20	Dredging, Charleston, S. C.	10-21
11-22*	Iron fence, etc., Boston, Mass.	11-11
11-24	Dredging, New York	11-11
11-27	Jetty work, Dallas, Tex.	11-11
11-27	Pneumatic system, Charleston, S. C	10-28
11-27	Seawall, N. Chicago, Ill.	11- 4
11-30*	Channel, Baltimore, Md.	11- 4
12- 1	Barge canal, Albany, N. Y.	11- 4
12- 1*	Fire apparatus, Wash., D. C.	11- 4
12- 1	Drainage ditches, Liberty, Tex.	10-28
12- 1	Towboat, Little Rock, Ark.	11-11
12- 1	Barge canal, Albany, N. Y.	11-11
1-17*	Irrigation work, Porto Rico	10-21
1-18	Dry dock, New York	10-21
2- 1	(1910) Monuments, Ottawa, Ont.	10-21

FOREIGN CONTRACTS.

11-12	Sanitary project, Spain	11- 4
12-10	Competitive plans, Argentina	11- 4

EXAMINATIONS.

11-13	Supt. Highways, Albany, N. Y.	10-28
11-22	Mechanical Draftsman, Phila., Pa.	10-21
11-23	Examiner of Accounts, Wash., D. C.	10-21
11-23	Junior Electrical Engr., Wash., D. C.	10-28
11-23	Junior Engr., Wash., D. C.	11- 4
11-24	Junior Chemist, Wash., D. C.	11- 4
11-24	Inspector's Asst., Wash., D. C.	10-21
11-24	Drainage Engr., Wash., D. C.	10-21

RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

ABILENE SHORT LINE.—Citizens of Abilene, Tex., are interested in the organization of this company, which plans to build a railroad about 85 miles long. H. J. Bradshaw, of Abilene, is Engr.

ALASKA CENTRAL.—See Alaska Northern.

ALASKA NORTHERN.—Announcement is made by Oscar Green Laberee, of Spokane, Pres. of the Alaska Northern Ry. Co., that the main line of this road, formerly the Alaska Central R. R., will be 450 miles in length, extending from a point on Resurrection Bay to Fairbanks, Alaska. In addition, there will be a branch line of 300 miles from Susitna station, through the Kuskuim country, to the new gold fields at Iditarod, also a branch line of 38 miles from Mile Post 146 to the Matauooska coal fields; $30,000,000 is the estimated cost of the work, which is to be completed in three years. Mr. Laberee gave out the following statement regarding the rumors that the Morgan interests are identified with the road: "J. Pierpont Morgan is not in any way interested in the new company. The Alaska Northern is strictly a Spokane corporation and will be directed solely by Spokane men. Former U. S. Senator Turner and R. D. Miller, of Spokane, and E. H. Morrison, of Fairfield, Wash., and myself are the incorporators. The road has been financed and we are going ahead with the construction work; 72 miles of line are in operation, and 2,000 men are in the field, with as many more ready to start. The present southern terminus is Seward, but this will be changed to another point on Resurrection Bay." Noted on Oct. 21.

ALBERTA CENTRAL.—We are officially advised that surveys are now in progress for this railway, which will run from Moose Jaw to Yellow Head Pass, via Red Deer, with branches. Right-of-way is partly obtained and capital is secured. J. Grant Macgregor is Ch. Engr., Red Deer, Alta. Noted fully on Oct. 28.

ATLANTIC NORTHERN & SOUTHERN.—This company is in the market for material for the construction of 58 miles of railroad. The material will be purchased by the engineering firm of Rattenborg, Ross & Judd, of Atlantic, Iowa, who are officers of the company.

CHICAGO GREAT WESTERN.—This company has acquired 130 acres at Stockton, Ill., 125 miles west of Chicago, for a new division terminal and big system of yards, it is announced in Chicago. W. H. Chadbourn is Ch. Engr., St. Paul, Minn.

CHICAGO, ROCK ISLAND & PACIFIC.—We are officially advised that improvements on the St. Louis Division consist of strengthening embankments, cleaning ditches, relaying rail and re-ballasting, which is all being done by the company's forces. There is a little contract work of putting in concrete culverts, and filling trestles, but it is of minor importance. J. G. Bloom, Dist. Engr., Topeka, Kan., is Engr.-in-Charge.

DENVER, BOULDER & WESTERN.—The company has set aside $100,000 for betterments and equipment and is considering for next year several extensions in Colorado, among them one to the tungsten camp of Nederland and another to Lakeville, the new camp of the Primos Co. on the Boulder County Ranch, where the company is building its big mill. W. B. Hayes is Pres., Boulder, Colo.

DYERSBURG NORTHERN.—John H. Watkins, 2 Wall St., New York, together with a corps of civil engineers and with S. Granger Latta and E. E. Rice, joint owners with Mr. Watkins of the Dyersburg Northern R. R., have made a preliminary survey for the extension of the road to Hickman, Ky. This road was only recently sold by Capt. R. M. Hall to Mr. Watkins, S. Granger Latta and E. E. Rice. It runs from Dyersburg to Tiptonville, Tenn., and will be continued from Tiptonville to Hickman, Ky.

ELIZABETHTOWN TERMINAL R. R.—On Nov. 16 the Public Service Commission, Second District, Albany, N. Y., will give a hearing on the application of the Elizabethtown Terminal R. R. Co. for a certificate of convenience and necessity. The proposed railroad will extend from Westport where it connects with the Delaware & Hudson R. R. to Elizabethtown, a distance of eight miles, and will be of service to the towns of Lewis, four miles north of Elizabethtown, and Keene, 12 miles west, all in the County of Essex. Freight and other business from these points is now hauled from Keene via Elizabethtown. The only way of reaching Elizabethtown is by way of the Elizabethtown-Westport Turnpike Co., which operates a toll road. The motive power to be used for the operation of the rolling stock of the proposed road will consist of combination passenger motor cars operated by gasoline. The common capital stock will be $80,000. The directors of the corporation are Richard L. Hand, Francis A. Smith, George W. Jenkins, Livingston Woodruff, Merritt O. Stanton, Victor W. Prime, Robert B. Dudley, Benjamin F. Stetson, Elton A. Foote and Herry H. Nichols, all of Elizabethtown. Noted on Oct. 21.

GULF & MAGNOLIA NORTHERN.—Construction probably will be started by this company about Jan. 1. This railroad will run from Magnolia to Hope, Ark., via Waldo and Bodcaw, 35 miles. About 3,000 ft. of trestle work will be required. S. Q. Sevier is Pres.; J. H. Betts is Vice-Pres. and R. L. Pritchard, Secy., at Hope, Ark.; J. L. Davis, Treas., at Magnolia, Ark. The other directors are F. S. Quinn, of Texarkana, Ark.; P. A. Tharp and W. Y. Foster, of Hope, Ark.; Charles Clark and C. A. Kennedy, of Waldo, Ark.; J. M. Witt and Henry Stevens, of Magnolia, Ark. G. H. Cravens is Engr., De Queen, Ark.

HIGHLAND PACIFIC.—Incorporated in California to build a scenic railroad from Lakeport, Cal., to Clear Lake. Capital, $2,500,000, of which $90,000 has been subscribed. The directors are J. E. Fulton, D. F. McIntyre, J. R. Garner, W. P. Mariner and A. E. Dickinson. Headquarters, Mills Bldg, San Francisco.

LOUISVILLE & NASHVILLE.—The CALLISTON CONSTRUCTION CO. and the GIBSON-CARR CO., both of Middleboro, Ky., have been awarded the contract for the construction of 6½ miles of new line for the Louisville & Nashville R. R., between Guthrie and Henderson. This contract will amount to $200,000. M. S. Callison, Shelby Gibson and Robert Gibson, all of Middleboro, will be in personal charge of the work. It will begin at once.

MEXICO NORTH-WESTERN.—We are officially informed that contracts have been awarded for the first ten kilometers south of Terrazas to A. M. TENNY, BENJ. ECHOLS and P. H. HURST. As noted on Oct. 14, work will be started at once on a connecting link of about 105 miles in Chihuahua, between Terrazas and Madera, from the present line extending south from Ciudad Juarez to Terrazas, 155 miles, with the line now in operation from Chihuahua west to La Junta, thence north to Madera, 205 miles. Noted on Sept. 9. H. C. Ferris is Gen. Mgr., Chihuahua; B. H. Bryant is Ch. Engr., and T. A. Stiles is Prin. Asst. Engr., at Nueva Casas Grandes.

NEW YORK CENTRAL & HUDSON RIVER.—The Public Service Commission, Second District, Albany, N. Y., on Nov. 3 gave a hearing upon the application of the New York Central & Hudson River R. R. Co. for authority to issue additional capital stock the the amount of 446,580 shares, of the par value of $100 each. Out of the proceeds of the sale of this stock it is proposed to pay the three-year 5% gold notes, amounting to $25,000,000, which become due on Feb. 1, 1910, the balance to be applied toward the improvements which have been or are now being made by the company. Albert H. Harris, Vice-Pres., and George W. Kittredge, Ch. Engr., appeared in support of the application. The schedule shows that the company proposes to spend, between Sept. 1, 1909, and Dec. 31, 1910, for new equipment the following amounts: Locomotives, $1,763,750; passenger equipment, $1,853,900; freight equipment, $7,980,400, and marine equipment, $439,500. Among the expenditures of the company for construction and improvement chargeable to capital, subsequent to Sept. 1, 1909, are $13,920,400 in connection with the electrification of the lines and station improvements in New York City and vicinity. The total of the expenditures listed under this head amount to $29,165,100. The Commission reserved decision.

NORFOLK & WESTERN.—An extension will be built between Berwind, W. Va., and Tazewell, Va. Estimated cost, $1,500,000. C. S. Churchill is Ch. Engr., Roanoke, W. Va.

OKLAHOMA & GOLDEN CITY.—Company will receive bids not later than January, it is stated, for its proposed line from Fairview, Okla., to Jefferson City, Mo., 300 miles, via Enid, Pawhuska, Joplin, Golden City and Climax Springs; also a branch from Climax Springs south to Springfield, Mo., 70 miles. Engineering work is partially done and part of the line has also been definitely located. J. W. Fewell, of Golden City, Mo., is Engr.-in-Charge. There will be five large bridges and a number of small ones. John A. Griesel, of Golden City, Mo., is Gen. Mgr. Among those interested are C. E. Hogarty, of Brooklyn, N. Y.; A. J. Bauer, of Jefferson City, Mo.; A. S. Vaughn, of Pittsburg, Pa.; J. W. Fewell, Fremont, Ohio; Charles T. Johnson, Washington, D. C.; Walter Bray, of Springfield, Mo.; H. L. Pease, of Climax Springs, Mo. The main line will be 300 miles long and the branch 70 miles long.

ST. LOUIS & OKLAHOMA.—Chartered in Oklahoma, with headquarters at Bromide, Coal County, and $50,000 capital, to build a line from Salisaw through Sequoyah, Haskell, Pittsburg, Coal, Johnston, Murray, Carter, Garvin, Stephens, Jackson and Greer Counties to a point between the Red River and the Salt Fork of the Red River, about 300 miles. Estimated cost, $15,000 per mile. The incorporators are O. E. Snyder, Erie, Kan.; J. D. Cameron, Kansas City, Mo.; E. S. Brodie, St. Louis, Mo.; J. M. Sholl, Joplin, Mo.; E. T. Brown, Coalgate, Okla., and W. H. Jackson, Bromide, Okla.

WESTERN PACIFIC.—Press reports from Sacramento, Cal., state that "without ceremony the last spike, joining the final span in the Western Pacific Railroad, from San Francisco to Salt Lake City and connected with the Denver & Rio Grande and other Gould roads, establishing a transcontinental system, was driven on Nov. 1. Within two or three weeks, it is said, a few freight trains will be operated. The actual completion of the new line will not be formally celebrated until Jan. 1, 1910."

WINNIPEG, SALINA & GULF.—Organized by F. H. Taylor, G. E. Graves and J. W. Wegner, to build about 1,500 miles of rail-

way from Winnipeg, Man., to the Gulf of Mexico. The section of the road which will be constructed first will extend from Superior, Wis., to Wichita Falls, Tex., through Beloit, Wis.; Great Bend, Kan.; Woynoka, Okla., and Weatherford, Tex., with an extension from Woynoka to Oklahoma City. Until the line is completed connections will be made with the Canadian Pacific at Superior and with the Texas & Pacific at Wichita Falls. The Interstate Construction Co., with a capital of $250,000, will be incorporated to build the line. Messrs. Taylor and Graves will obtain subscriptions for $120,000 of the stock, the remaining $130,000 having been assured. The Winnipeg, Salina & Gulf, the operating company, will incorporate in the near future, with a capital of $25,000,000, which subsequently will be increased. Offices will be located in the National Bank of Commerce Bldg., St. Louis, Mo.

ELECTRIC RAILWAYS.

NEW YORK, N. Y.—The New York, Westchester & Boston Ry. Co., (New York, New Haven & Hartford R. R. Co., lessee), has awarded contract to the FERGUSON CONSTRUCTION CO., 37 Wall St., for Section 1 of the Mount Vernon-White Plains, N. Y., extension. HENRY STEERS, 17 Battery Pl., New York, has been awarded contract for Section 2 of this extension, which will be nine miles long. J. L. Crider is Ch. Engr. the Westinghouse-Church-Kerr Co., 10 Bridge St., New York, is Consult. Elec. Engr. Noted fully on July 22.

WHITE PLAINS, N. Y.—The Tarrytown, White Plains & Mamaroneck Ry., under $300,000 foreclosure suit brought by the Knickerbocker Trust Co., was sold on Nov. 5 by Referee Henry R. Barrett, of White Plains, to the New York, New Haven & Hartford R. R. Co. for $825,000 for the main line running from Tarrytown to White Plains and Mamaroneck, for $460,000, and also the branch line from White Plains to Scarsdale for $365,000. Noted on Oct. 14.

POTTSVILLE, PA.—We are officially advised that surveys are being made for an electric railway, to be known as the Pottsville & Shenandoah Elec. R. R., which will run from Pottsville to St. Clair, Norea and Shenandoah, 14 miles. J. H. Eby is Engr.-in-Charge. St. Clair, Pa.

WAYNESBURG, PA.—The Waynesburg & Blacksville St. Ry. Co., recently chartered, to build an electric railway from the Pennsylvania and West Virginia state line at Robert's Run along the Roberts and Smith Creeks, 14 miles, to Waynesburg, has been granted authority to build about 50 miles of extension. Samuel Eakin, Wadestown, W. Va., is Pres. The other incorporators are R. E. Lent, Chas. H. King, L. L. Thomas and N. B. Patterson. Capital stock, $84,000.

SHELBYVILLE, TENN.—W. C. Frost, of Nashville, Tenn., wishes to get in touch with reliable railroad builders who might become interested in a plan for an electric railway between Shelbyville and Fayetteville, Tenn., 30 miles, it is stated. 75 per cent. of grading is completed and residents offer to take $100,000 in stock. It is estimated that it will cost $200,000 to build the road.

MEMPHIS, TENN.—Geo. E. Bushnell, Gen. Mgr. of the Tennessee Traction Co., with general offices in Memphis, advises us that this company has been chartered to build an electric line from Memphis to Nashville, via Jackson, 210 miles. Capital stock, $50,000. The officers are: Pres., W. K. Burton; Vice-Pres., W. R. Gilbert; Secy. and Treas., Horace N. Smith; Gen. Mgr., Geo. E. Bushnell.

CINCINNATI, OHIO.—We are officially informed that the Cincinnati, Portsmouth, Pomeroy and Pittsburg Elec. Ry. Co., has made surveys for its proposed line. This company proposes to construct an electric railway from Cincinnati to Pittsburg along the Ohio River Valley. Right-of-way is being secured, and at present more than 200 miles have been acquired out of a total of 466 miles. It is expected to obtain the rest of the right-of-way by January and to begin construction early next spring. A. E. Cox, 1502 Third Ave., Huntington, W. Va., is Pres.; C. P. Sanborn is Ch. Engr., at Huntington.

TOLEDO, OHIO.—The property, franchises, etc., of the Toledo & Indiana Ry. Co., will be sold by I. C. F. M. Niles, Special Master, at the Lucas County Court House, Toledo, at 10 a. m., Nov. 17.

DELPHI, IND.—The Commissioners of Carroll County have ordered an election to be held on Nov. 9 on the proposition of Monroe Township voting a subsidy of $20,000 in aid of the construction of the Delphi, Flora & Burlington Traction Co.'s line. E. W. Bowers, is Pres., Delphi. Noted on Oct. 21.

LOGANSPORT, IND.—The County Commissioners have granted a franchise to the Indiana Northwestern Traction Co. to build and operate an interurban line north through Cass county. The company proposes to enter this city in Bates St. on the west side. The line will parallel the Panhandle tracks to Lake Cicott, and then will go west to Monticello. The plan is to continue the line to Chicago. W. F. Brucker, Monticello, Ind., is Pres. Noted on Oct. 28.

SCOTTSBURG, IND.—The preliminary survey of the Cincinnati, Madison & Western Traction line has been completed, and the engineers are now making estimates on bridges, fills, etc., preparatory to commencing the actual construction of the road. Noted on Oct. 28.

MURPHYSBORO, ILL.—The Murphysboro & Southern Ry. Co. has awarded contract for grading to LEONARD GRIFFIN, Murphysboro. This company was recently incorporated to build an interurban railway from Murphysboro to Shawneetown. Capital stock, $250,000. Incorporators: A. B. Minton, W. C. Alexander and J. G. Hardy.

VIRGINIA, MINN.—V. M. Pindle, Duluth, representing W. M. Pindle, Duluth, and W. D. Chapman, Chicago, Ill., has applied to the City Council for a franchise to build an electric railway in Virginia. The company intends to construct an electric railway from Virginia to Eveleth and Gilbert and later to Hibbing.

ST. LOUIS, MO.—The St. Louis-Kansas City Electric Railway Co. has been incorporated in Missouri to build a high-speed double-track electric railway without grades or curves from St. Louis to Kansas City, including a branch from Glasgow, Mo., via Charlton to Brookfield, Mo.; total length, 295 miles. Capital stock, $5,000,000. Officers have been elected as follows: D. C. Nevin, Kansas City, Pres.; John H. Berkshire, First Vice-Pres.; B. L. Dorsey, Denver, Colo., Second Vice-Pres; Charles A. Loomis, Kansas City, General Solicitor; J. H. Reeder, Kansas City, Asst. Gen. Solicitor; H. E. Insley, Kansas City, Secry. and Auditor; H. V. Johnson, Denver, Treas.

TULSA, OKLA.—We are officially advised that surveys have been made and right-of-way mostly secured for the Mid-Continent Traction & Power Co.'s line. It will run from Joplin, Mo., to Shawnee, Okla., 163 miles. Contract for 15-mile section between Tulsa, Tanaha and Sapulpa has been let and work is under way. Graham Burnham is Pres., and J. Robert Burnham is Ch. Engr., Tulsa. Noted fully on Oct. 21.

DENVER, COLO.—The Denver, Colorado Springs & Pueblo Interurban Electric R. R. Co., has completed its permanent line survey between Denver and Colorado Springs, a distance of 73 miles, for its proposed railway. Arrangements with the Denver City Tramway and the Colorado Springs & Interurban Railway have been completed, it is stated, the company operating over the terminal tracks from the city limits both of Denver and Colorado Springs. L. E. Briggs, Cooper Bldg., Denver, is Ch. Engr.

CHEHALIS, WASH.—The Twin City Light & Power Co. has let contract to A. J. McCABE, of Portland, for grading and filling on the interurban line over the right-of-way between this city and Centralia. The contractor is to complete the work in 60 days.

PENDLETON, ORE.—The Umatilla Ry. & Elec. Power Co. has engineering work under way for its projected electric line. The railway, which is to be approximately 100 miles in length, will extend from Pendleton south through Pilot Rock, Nye, Alba, Ukiah and into Dale. The company proposes to erect a hydro-electric plant on the John Day River. Capital stock, $100,000. Officers and directors: Hon. Douglas Belts, Pilot Rock, Pres.; Geo. A. Brown, Vice-Pres. and Gen. Mgr.; A. R. Turner, Secy. and Treas.; C. J. Smith and Hon. Stephen A. Lowell.

PORTLAND, ORE.—Surveys for the 3-mile extension of the Cazadero line to the headwaters of the Clackamas have been completed by the engineering forces of the Portland Railway, Light & Power Co. It is to be one of the most expensive pieces of electric railway construction ever undertaken in the Northwest, costing about $100,000, or $3,000 a mile for the single track, it is said. A. H. Richmond is Ch. Engr.

MARYSVILLE, CAL.—The California Midland R. R. Co. will resume construction soon. The line is to connect Marysville, Grass Valley, Nevada City and Auburn, and will be about 80 miles in length. John Martin is Pres., F. E. Fitzpatrick is Gen. Mgr., and Chas. F. Trow is Ch. Engr., 708 Alaska Bldg., San Francisco.

LIGHT AND POWER PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

PORTLAND, ME.—Bids will be received until Dec. 1 by the City Hall Building Committee Adam P. Leighton, Chn. for electric work and ventilating and heating for the new city hall. Carrere & Hastings, 225 Fifth Ave., New York, and John Howard Stevens, 187 Middle St., Portland, are Associate Archs.

KITTERY, ME.—The Kittery Water & Light Co., recently incorporated, is making preparations to furnish the city with electricity for street lighting and interior service before the winter is over. Electrical energy for operating the system will be secured from the plant of the Rockingham County Light & Power Co. of Portsmouth, N. H., this company proposing to extend a cable across the river to carry the transmission line from its plant in Portsmouth to Kittery. John S. Whittaker, Gen. Mgr. Rockingham County Light & Power Co. is Pres. Kittery Water & Light Co.

WORCESTER, MASS.—The Worcester Electric Co., W. H. Coughlin, Mgr., has purchased a site on Webster St. and will construct a new plant, to cost, with equipment and site, between $300,000 and $400,000.

CHELSEA, MASS.—The Edison Electric Illuminating Co., 39 Boylston St., Boston, Mass., has submitted a bid to the Board of Control for lighting the streets of the city as follows: For furnishing electricity for 418 incandescent lamps of 60 c. p. to be operated 3828 hrs per year, one year, $23.48 per lamp; three years, $22.77; five years, $22.31; ten years, $21.13 per lamp per yr.

LEOMINSTER, MASS.—Cluett, Peabody & Co., of Leominster, have decided to install a power plant to furnish electricity for operating their factory. The company will also change its lighting system, installing tungsten lamps in place of incandescent lamps.

NEW YORK, N. Y.—Bids are asked until 4 p. m., Nov. 22, by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, for installing gas fixtures, together with burners, mantles, chimneys, globes, shades, reflectors and by-passes, complete, upon a "purchase and maintenance" basis or a "rental" basis, in the halls, corridors, classrooms and exit stairs mentioned in these specifications, at Public Schools Nos. 8, 16, 17, 43, 49, 70, 71, 77, 79, and 83, Boro. of Manhattan.

HILTON, N. Y.—The Public Service Commission, Second District, has granted the Hilton Electric Light, Heat & Power Co., permission to issue $5,000 of capital stock, to construct an electric plant, and to exercise its franchises in the village of Hilton, and also to issue bonds for $5,000, for the construction of the plant.

SYLVAN BEACH, N. Y.—The Public Service Commission has authorized the construction and operation of an electric light plant in the territory known as Sylvan Beach, town of Vienna, to furnish electricity for municipal and other purposes.

BAY SHORE, N. Y.—The Board of Trade has adopted a resolution favoring the installation of a municipal electric light plant and water works system.

MASSAPEQUA, N. Y.—Plans are being prepared for a water supply system to be laid out in Massapequa, and for an electric lighting plant to illuminate the development of the Queens Land & Title Co. The Massapequa Water, Light & Power Co., recently incorporated, will operate these plants when completed.

TRENTON, N. J.—Articles of incorporation were filed at Trenton on Nov. 8 for the Great Falls Power Co. with an authorized capital stock of $17,000,000. The object of the corporation is to acquire and deal in water, water rights and power and to generate electricity for all purposes by water power. The capital stock is divided into $10,000,000 preferred, bearing 7% cumulative dividends, and $7,000,000 common. The incorporators are W. C. Parker, L. J. Relyea and F. W. Griswald and the registered office is at 76 Montgomery Ave., Jersey City.

HOBOKEN, N. J.—The City Council on Oct. 27, rejected all bids received for lighting the streets, roads and public places by electricity, and will ask new bids.

PHILADELPHIA, PA.—EDWARD FAY & SON, 1521 Ranstead St., Philadelphia, have secured the contract for constructing power plant at the naval home, Philadelphia, at $12,952. Bids were opened on Oct. 16 by the Bureau of Yards and Docks, Navy Department, Washington, D. C.

PHILADELPHIA, PA.—JAMES G. DOAK & CO., 1420 Chestnut St., has contract to build a 2-story power-house, 26 x 36 ft., at Commerce and Percy Sts., for the Victoria Theatre at 913 to 917 Market St. Cost, $7,500.

INTERCOURSE, PA.—Plans are being prepared by the Intercourse Electric Light, Heat & Power Co. for extending its transmission lines to Leaman Place, Paradise and Gordonville, a distance of about three miles, to furnish electricity for lamps and motors. Enos I. Zimmerman is Secy. and Treas.

FORT MYER, VA.—We are officially advised that contracts have been awarded as follows, bids opened on Oct. 13 by Capt. Warren W. Whiteside, Constructing Q. M., U. S. A., Fort Myer, for interior electric wiring of 44 buildings, including fixtures and the installation of a complete outside distributing system for this post. Alternae bids will be received for underground and overhead distributing system: To J. F. BUCHANAN & CO., 36 North Fourth St., Philadelphia, Pa., for wiring buildings for electric lighting, installing Wattmeter connections and furnishing and installing fixtures in the same buildings at $14,788; to McCAY ENGINEERING CO., 9 East Lexington St., Baltimore, Md., for underground conduit system with all manholes and junction boxes for the installation of an electric lighting system at $8,500; to same for underground and aerial system of transmission, primary secondary and service lines, complete street lighting system, furnish and installing cutouts, street lamp poles and brackets, a $14,300; to NATIONAL ELECTRIC SUPPLY CO., Washington, D. C., for furnishing and installation of tungsten lamps and apparatus for the basement of building No. 8, at $466.

GREAT CACAPON, W. VA.—Plans are being considered by the Hydro-Electric Developing Co. for the construction of a hydroelectric power plant at Edes Fort, on the Great Capacon River, including the construction of a dam with a 100-ft. head, where it is estimated that 3000 HP. can be developed for transmission by electricity. The equipment will include four 4000-HP. vertical turbines direct-connected to vertical type generators. Samuel R. Boyer, of Steelton, Pa., is Secy. Bids will be received about March 1.

BROOKLIN, W. VA.—Application has been made to the town officials by the New Martinsville Electric Light, Heat & Power Co. of New Martinsville, W. Va., R. E. Hall, Ch. Engr., for a franchise to establish an electric light plant here.

FORT SPRING, W. VA.—Preparations are being made by B. F. Mann for the construction of a hydroelectric power plant to develop 1000-HP. for transmission by electricity. The plans call for the construction of a dam 47 ft. high, 150 ft. at the base and 250 ft. at top. Surveys will be made at once and construction work will begin next spring.

CUTHBERT, GA.—The city has voted $20,000 of bonds for electric light and waterworks improvements.

AMHERST, OHIO.—Plans are being made to increase the output of the municipal electric light plant, including the installation of an engine and 1000-KW. generator.

COLUMBUS, OHIO.—Bids were opened on Oct. 27 by the Board of Managers of Ohio Penitentiary George U. Crevelin, Secy., for erecting a brick power house. Contract has been awarded to B. EVANS & CO., of Columbus, at $33,3[illegible] Marriott & Allen, are Archs., 20 E. Broad St., Columbus. Osborn Engraving Co., Cleveland, are Engrs.

PENDLETON, IND.—Plans are being prepared by Carmen & Fry[illegible] Consulting Engrs., 334 East Market St., Indianapolis, Ind., for electric light plant to be constructed here by William A. [illegible] Holmes, 218 American Central Ira M. [illegible] Bldg., Indianapolis.

FORT WAYNE, IND.—The [illegible] of Public Works will soon let contract for furnishing and installing a new [illegible] at the electric light plant and for [illegible] to be installed during the coming [illegible]

STURGIS, MICH.—The citizens have voted $175,000 of bonds, to acquire [illegible] develop the Leland water power on [illegible] Joseph river, 18 miles from Sturgis, [illegible] supply electricity for the municipal [illegible] light and water plants and 1000 H[illegible] manufacturing purposes.

CRANDON, WIS.—Preparations are being made for the installation [illegible] electric power plant and pumping station in Crandon soon, bonds for which have been issued.

SAUK CENTER, MINN.—The [illegible] Mfg. Co., of Sauk Center, is planning to rebuild its plant, which was recently destroyed by fire. The company will soon be in the market for equipment for the plant including boilers, engine, generator and other apparatus.

ASHLAND, KAN.—The citizens have voted to issue $30,000 of bonds, $20,000 of which will be used to erect a water works system and $10,000 for an electric light plant.

HOLDREDGE, NEB.—The City Council is contemplating extending the street lighting service in the residential section of the city.

HARVARD, NEB.—The Harvard Electric Co. has applied to the State Railway Commission for permission to issue $12,000 of bonds, to construct an electric light plant The city at present has no electric system, but has made all necessary contracts for construction of the plant.

AURORA, NEB.—The Aurora Electric Light Co., Verne Smith, Ch. Engr., has petitioned the State Railway Commission for permission to issue $28,000 of bonds. The company contemplates the construction of a central heating plant.

OMAHA, NEB.—Plans are being prepared by the Omaha & Council Bluffs Street Ry. Co. for the construction of a new power plant, which, with equipment, will cost about $1,000,000. The new plant will be located at the foot of Jones St. across from the present power house. G. W. Wattles, of Omaha, Neb., is Pres.

TOWNER, N. DAK.—Plans and estimates are being prepared by E. D. Jackson, of St. Paul, Minn., for the installation of an electric light plant here.

WATERTOWN, S. DAK.—Plans are being made by the Watertown Light & Power Co. for the construction of a new power station, which will be equipped with 60-cycle, 3-phase equipment. The company desires catalogues and information from manufacturers of electrical machinery and apparatus. James W. Ferris is Sec. and Mgr.

ST. LOUIS, MO.—The Laclede Gas Light Co., John I. Beggs, Pres., Milwaukee, Wis., is reported to be contemplating the erection of an electric plant to furnish electricity to office buildings and industrial plants for lamps and motors.

CANADIAN, TEX.—Plans are being prepared for the construction of an electric light plant here. C. W. Conrad, C. E., of Topeka, Kan., is Engr.-in-Charge.

GALVESTON, TEX.—Bids will be received until Nov. 11 by John D. Kelley, City Secy., for a condenser apparatus, including jet condenser, two pumps and necessary piping, from exhaust side of engine and from the receiver tank in order to secure a vacuum of from 27 to 28 in. on the exhaust from two 100-KW. General Electric turbines; temperature of water, 85° F.; average of available cooling water, 1,000,000 gallons per 12-hr. night.

Bids were opened on Oct. 21, as follows, for furnishing and installing in the city power plant a direct-connected engine generator set of not less than 150 KW. capacity, including also the switchboard, etc.: The Iowa Electric Co., Galveston, $10,750; A. Baldwin & Co., Ltd., New Orleans, La., $12,090; L. P. Tschumy & Co., Galveston, from $12,900 to $11,978. W. D. Masterson is City Supt. Electricity.

EAGLE PASS, TEX.—Plans are being considered by the Eagle Pass Industrial League for the organization of a company to construct a hydro-electric power plant. The plan includes the purchase of the local electric light plant, water works system and ice factory, all to be operated by electricity transmitted from the plant. Electrical energy will be furnished also for industrial plants in Eagle Pass and Porfirio Diaz, across the Rio Grande River in Mexico.

DURANT, OKLA.—The city has voted $20,000 of bonds for installing an electric-light plant.

BLACKWELL, OKLA.—The city has awarded contract to LUND & CUNYON, Blackwell, for improvements to electric-light system and extension of water-works including enlarging power-house and installing 150 and 75-KW. generators and Corliss engines and boilers. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

AZTEC, N. MEX.—The Aztec Light & Power Co., it is reported, will purchase equipment for a power plant and electrical transmission during the winter.

SPOKANE, WASH.—The Mattawa Power & Irrigation Co., of Spokane, has been incorporated with a capital stock of $500,000 by Edward Campbell and William J. Sanderson.

NAPA, CAL.—Preparations are being made by the Napa Valley Electric Co., for the erection of a transmission system to furnish electricity for lamps and motors in Napa County. The company has purchased the franchises and contracts of the Snow Mountain Power Co. in Napa, St. Helena and Calistoga. The system may be completed within 30 days. The Napa company will distribute electricity generated by the Snow Mountain Co. Henry Brown, of Napa, is a director.

FRESNO, CAL.—The San Joaquin Light & Power Co. has awarded contracts as follows: To the GENERAL ELECTRIC CO., of Schenectady, N. Y.; for generators and transformers, to the PELTON WATER WHEEL CO., 19th and Harrison Sts., San Francisco, for 4,000 ft. pressure pipe line; to ABNER-DOBLE CO., of San Francisco, for water wheels. J. G. White & Co., 43 Exchange Pl., New York, are Designing and Supervising Engrs.

SAN FRANCISCO, CAL.—Bids will be received by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until Dec. 18, for power plant, including boilers, engines, electric generators, switchboard, conduits, wiring, heating and ventilating apparatus, deep well, deep well pumps and vacuum cleaning system, for the U. S. Custom House and Appraisers' Stores buildings at San Francisco, in accordance with drawings and specification copies of which may be obtained at the office of the Supervising Architect, or at the office of Eames & Young, Archs., Wright Bldg., St. Louis, Mo., at the discretion of the Supervising Architect.

KINGMAN, ARIZ.—Preparations are being made by the Frisno Mines Power Co. operating near here, to install an electric power plant on its property.

SALT LAKE CITY, UTAH.—A. W. Gallagher, of the Utah Light & Ry. Co. has made application to the State Engineer for permission to divert 6,000 ft. of water from the flow of Middle Canyon Creek in Tooele County, to be used for an electrical plant, with a capacity of 200 HP.

GRANGERVILLE, IDAHO.—Five million dollars is the stated capital of a company now being organized in Spokane to develop a power site on the Snake and Salmon rivers in Central Idaho, 40 miles south of here, where A. W. Trine and G. F. La Frenz of Spokane, have located a dam and site for a power plant. The project involves the boring of a tunnel of 7½ miles through solid rock. Two hundred and eighty thousand horsepower can be developed for railroad, irrigation and other purposes. The developing plan calls for a combination tunnel and dam, the latter being 100 ft. in height located on the Salmon River, ¼-mile from the point where the long tunnel will leave the waterway for the Snake River. There is a fall of 530 ft. in the distance through the tunnel, which is to be 18 by 24 ft. R. J. Zell of Spokane, has been working on the project for two months and the estimates on cost of construction for the dam and tunnel are nearly all in. Water rights have been taken out for 8,000 second feet for the dam on the Salmon River and 2,800 second feet for the Snake River side. The power plant and buildings will be located at that point.

MONTREAL, QUE.—Bids are asked until Dec. 1, for 1,000 HP. water tube boilers 200 lbs. pressure for the Saraguay Electric & Water Co. Charles Brandeis, Engr., Montreal.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

*NEW HAVEN, CONN.—Bids will be received by C. W. Kelly, City Engr., until 2 p. m., Nov. 22, for constructing a reinforced-concrete arch bridge on Edgewood Ave. over West River. The bridge will consist of three arches. Estimate of principal items: 3,973 cu. yds. of concrete, 196,700 lbs. of twisted steel bars. A separate contract will be let for grading the approaches of the bridge, requiring about 57,000 cu. yds. of filling.

NEW YORK, N. Y.—See item under Streets and Roads.

UTICA, N. Y.—F. C. Stevens, Supt. Pub. Wks., Albany, has awarded to N. D. PETERS CO., of Utica, contract for constructing a lift bridge over the Erie Canal at Seneca St., Utica, at $15,991. Other bids were: Henry Tosh & Son, Port Byron, N. Y., $17,293; W. J. Burns Co., Syracuse, informal. Engineer's estimate, $15,473. The contract calls for the completion of the bridge by May 1, 1910. Bids were opened on Nov. 4.

CATSKILL, N. Y.—Contract for constructing a concrete bridge over the Vosenkill at Main St. has been awarded to the UNION BRIDGE CONSTRUCTION CO., at $4,954.

EAGLE HARBOR, N. Y.—The State Canal Board, Albany, decided to construct a lift bridge here. Estimated cost, about $35,000.

SYRACUSE, N. Y.—F. M. Williams, of Albany, State Engr. and Surv., is making preliminary surveys for the construction of the Franklin St. bridge here.

SULLIVAN, N. Y.—Contract for furnishing material and erecting a steel riveted truss bridge with concrete and macadam floor system, bids opened on Oct. 30, has been awarded to CLIMAX ROAD MACHINE CO., at $6,900.

MILLVILLE, N. J.—The Bridge Committee of the Board of Freeholders on Oct. 27 awarded contract for the construction of the Mauricetown bridge over the Maurice River to the OWEGO BRIDGE CO., West End Trust Bldg., Philadelphia, at $9,501.

POTTSTOWN, PA.—The Philadelphia & Reading Ry. Co. has awarded contract to HAWMAN BROS., of Reading Pa., for the construction of a concrete viaduct at about $30,000.

*READING, PA.—Bids were received by A. L. Rhoads, County Controller, on Nov. 4, for constructing a 1-span steel truss bridge over Tulpehocken Creek, known as the Blue Marsh Bridge; also for concrete abutments and wing walls for said bridge. Contract has been awarded to the PENN BRIDGE CO., Beaver Falls, Pa., at $5,395.

PITTSBURG, PA.—See item under Water Supply—Irrigation.

INDIANA, PA.—Bids are asked by the Commissioners of Indiana County until 1 p. m., Nov. 11, for the erection of a new iron bridge over Yellow Creek in Homer City, of the box-girder type or through curved upper cord or camel-back truss bridge, of the same capacity, same width, same foundation and steel grades, similar floor sidewalks.

BALTIMORE, MD.—B. T. Fendall, City Engr., has prepared plans for a concrete bridge 130 ft. long with a 24-ft. driveway and two 6-ft. sidewalks, to be erected over Gwynn's Falls at Franklin Road. Estimated cost, $15,000.

*WASHINGTON, D. C.—Bids were received as follows on Nov. 6 by the Commissioners of the District of Columbia for four ornamental lamp posts in (a) bronze or (b) c.-i. for the 16th St. bridge over Piney Branch: J. W. Fiske Iron Works Co., 56 Park Place, New York, (a) $14,770, (b) $1,700; F. B. Smith Wire & Iron Works, Chicago, (a) $8,198, (b) $2,798; Belmont Iron Works, Real Estate Trust Bldg., Philadelphia, (a) $13,750, (b) $1,448; Snead & Co. Iron Works, Jersey City, N. J., (a) $15,047, (b) $4,092; J. L. Mott Iron Works, Washington, (a) $2,795 each, (b) $472 each.

CUMBERLAND, VA.—Bids will be received until noon, Nov. 13, by O. St. J. Wilson, State Highway Comr., Richmond, for constructing a steel bridge near Flanagan's Mill, Cumberland County, one span, 61 ft. 6 ins. in length.

RADFORD, VA.—The Norfolk & Western Ry., C. S. Churchill, Ch. Engr., Roanoke, Va., will construct a bridge 16 ft. wide. Estimated cost, $6,000.

RICHMOND, VA.—The Richmond & Henrico Ry. Co. has awarded contract to the BLAKE CONSTRUCTION CO., New York, for constructing a viaduct between College and 21st and Marshall Sts. It will be one-half mile long and 42 ft. wide. Cost, about $300,000. The Blake Co. will sublet contract to WINSTON & CO. and W. O. BURTON, both of Wheeling.

BENWOOD, W. VA.—The Pennsylvania Steel Co., Stephen Girard Bldg., Philadelphia, Pa., has submitted the lowest bid for the construction a 3,000-ton bridge over the Ohio River between Bellaire, Ohio, and Benwood.

BIRMINGHAM, ALA.—The St. Louis & San Francisco R. R., M. C. Byers, Ch. Engr., St. Louis, Mo.; Illinois Central R. R., A. S. Baldwin, Ch. Engr., Chicago, Ill., and Birmingham Belt R. R., M. Copeland, Supt., Tuscaloosa, Ala., propose to construct a viaduct under Twelfth Ave.

CLEVELAND, OHIO.—Bids are asked until noon, Nov. 18, by the Board of Public Service for the construction of the substructure of a highway bridge and approaches over tracks of the New York Central & St. Louis Ry. Co. E. H. McIntosh is Secy.

READING, OHIO.—The County Commissioners have ordered the construction of a concrete bridge across the Millcreek at Benson St., between Reading and Lockwoood.

LISBON, OHIO.—BOYD & MILLIGAN have been awarded contract for new beams and channels for the bridge at Williamsport, at $3,774.

DANVILLE, IND.—Bids are asked by the Commissioners of Hendricks County until 10 a. m., Nov. 15, for the construction of a bridge over Eel River in Eel River Township. W. H. Nichols is Audr.

PEORIA, ILL.—The MISSOURI BRIDGE & IRON CO., East St. Louis, Ill., was awarded contract on Nov. 3 for building the new 60-ft. steel bridge across Hickory Run in Jubilee Township. Eleven bids were received by the Road and Bridge Committee of the Supervisors. The new bridge is to have a concrete abutment and steel substructure.

HOLTON, KAN.—Bids are asked until noon, Nov. 11, by J. W. Martin, County Clk., for the construction of a steel bridge between Section 18, Township 6, Range 14, and Section 13, Township 6, Range 13, in Jackson County. The structure is to be 30 ft. in length and is to have a 14-ft. roadway. W. A. Douglass is Chn. County Bd.

TOPEKA, KAN.—Plans are being prepared by John Rodgers, Engr., Topeka, for constructing a steel and concrete bridge over Kansas River. C. B. Burge is City Clk.

LAWRENCE, KAN.—Bids will be received by W. R. Green, Clk. Bd. County Comrs., until Nov. 13 for furnishing the steel and constructing two bridge spans, a 50-ft. girder and a 75-ft. truss; also a set of steel joists for a third bridge and a stone abutment, flooring to be furnished by County.

CASSELTON, N. DAK.—JARDNE & ANDERSON were awarded contract on Nov. 3 by the County Commissioners for the construction of five bridges here.

GOLDEN CITY, MO.—The Oklahoma & Golden City R. R. Co., John A. Griesel, Gen. Mgr., will construct five large bridges and a number of small bridges.

PORTLAND, ARK.—Ashley County has decided to construct a bridge across Bayou Bartholomew.

FORT WORTH, TEX.—The Fort Worth & Rio Grande Ry. Co., J. B. Berry, Supervising Engr., Chicago, Ill., will construct pile bridges and c.-i. pipe culverts in connection with construction of the railroad.

WEATHERFORD, TEX.—The city has authorized the Bridge Committee to secure plans and receive bids for the construction of the proposed Elm St. bridge.

SAPULPA, OKLA.—Creek County has voted $200,000 of bonds for the construction of 60 bridges.

LAWTON, OKLA.—Lawton & Fort Sill Electric Ry. Co., Lawton, will construct a 50-ft. bridge over Medicine Creek.

SAN JUAN, N. MEX.—Contract for constructing a steel highway bridge over San Juan River here has been awarded to M. J. PATTERSON CONSTRUCTION CO., of Denver, Colo., at $8,724.

CASTLE ROCK, WASH.—The County Commissioners of Cowlitz County, Kalama, have decided to erect a steel bridge over the Cowlitz River at Castle Rock. Estimated cost, $35,000.

MODESTO, CAL.—The Supervisors have awarded contract to the PACIFIC CONSTRUCTION CO. for the repairing of the La Grange and Waterford bridges, at $7,430. The Clark and Henery Construction Co. bid $7,620 for the work.

RIVERTON, UTAH.—The County Commissioners on Nov. 1 awarded contract to the MIDLAND BRIDGE CO., Gibraltar Bldg., at $5,392, for the construction of the steel bridge over the Jordan River here.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Dec. 4, for construction on oil storage house at the Navy Yard, Boston. Specifications are on file at the office of Engineering News, New York.

The contract to erect a high school at Codman sq. Boston, has been awarded to WILLIAM CRANE, 7 Water St., Boston. The architects are Hartwell, Richardson & Driver, 62 Devonshire St. The building will be constructed of brick and stone. It will have three stories and basement, 122 × 110 ft. Cost, $125,000.

PITTSFIELD, MASS.—James Knox Taylor, Superv. Archt. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Pittsfield, Mass., to the OSCAWANA BLDG. CO., 200 Fifth Ave., New York, at $80,000. Time, Oct. 31, 1910.

W. J. Eaton, of Albany, N. Y., has bought from E. H. Bridgeman for about $75,000 the property formerly owned by the Y. M. C. A., and located on the east side of North St. This property is 74 × 203 ft. in size and a plot 64 × 203 ft. is available for a theater site. At the south end of the property is a driveway. It is the purpose of Mr. Eaton to erect a ground-floor theater with a North St. entrance, and the building will probably cost $50,000.

NORTH ADAMS, MASS.—Bids were received as follows on Nov. 4, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at North Adams, Mass.: Woodbury & Leighton Co., 166 Devonshire St., Boston, Mass., $75,916; Whitney Bros., 219 Church St., North Adams, Mass., $72,620; M. P. Wells, Philadelphia, $67,431; Wills & Marvin Co., 1170 Broadway, New York, $71,837; A. E. Stephens Co., Binghamton, N. Y., $67,950; West Chester Engineering Co., New York, $76,600; William H. Fissell & Co., St. James Bldg., New York, $69,700; J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, $65,800; Oscawana Bldg. Co., 200 Fifth Ave., New York, $71,970.

STAMFORD, CONN.—Competitive plans are invited by Thomas D. Bradstreet, State Comptroller, Hartford, Conn., until noon, Nov. 20, for an armory at Stamford to cost $50,000 and one at Torrington to cost $40,000, appropriations for which have been made by the General Assembly.

GREENWICH, CONN.—MERTZ BROS. & CO., of East Port Chester, N. Y., have secured the contract for the club house for the Feirfield County Golf Club. The subcontracts will be let soon. Walker & Gillette, 131 West 40th St., New York, are Archs.

RIVERHEAD (L. I.), N. Y.—George A. Miller, Chn., and J. Fred Flugarth, Clerk of the Suffolk County Bd. of Supervs., have made an agreement with William J. Beardsley, 49 Market St., Poughkeepsie, N. Y., under which Mr. Beardsley is employed as the supervising architect for drawing the plans of and supervising the construction of the new jail. Under the terms of the agreement Mr. Beardsley is to furnish full architectural services and regular supervision of all the work, and is to furnish a competent superintendent during the erection of the jail. The proposed jail is estimated to cost about $175,000. The plans for the jail anticipate 145 cells, with all the modern improvements for sanitation, light and the control of prisoners. The building will be 168 × 48 ft., three stories high, and will have separate lighting, water and sewage disposal plants. There will be a 12-ft. concrete wall around the jail. Noted on Oct. 21.

NEW YORK, N. Y.—W. & J. Sloane, Broadway and 19th St., have leased from Commodore Elbridge T. Gerry through the Cruikshank Co., 141 Broadway, the northerly half of the Windsor Arcade site at the southeast corner of Fifth Ave. and 47th St. The property measures 100.5 ft. on Fifth Ave. and 280 ft. on 47th St., extending back to the new Ritz-Carlton hotel, and on the expiration of the present leases they will improve it with an 8-story building, to be occupied exclusively by the Sloane firm as showrooms for carpets, rugs and furniture.

Title has been taken by the Greenpoint Masonic Hall Association to a piece of property in Lorimer St., 100 ft. north of Norman Ave., on which a Masonic temple will be built. The property is 60 × 100 ft. The various lodges and orders are making their headquarters in the old building at Meserole and Manhattan Aves. The work of construction of the temple will begin in about two years, and it is expected to cost $50,000.

Maxmillan Zipkes, 103 Park Ave., will receive estimates for the proposed 10-story fireproof loft building, 40 × 92 ft., which the 133 West 19th St. Co. is to erect at 133 West 19th St., at a cost of $75,000.

Plans have been filed for enlarging the hall of the Automatic Vaudeville at 134 and 136 East 14th St., which was originally Theiss's Music Hall, by adding a rear extension 46½ ft. deep, to be fitted as a stage extension and dressing rooms, the improvements being made for S. Schinasi, as owner, from designs by S. S. Sugar. Cost, $50,000.

NEW YORK, N. Y.—Bids are asked by Thomas F. Foley, Sheriff, until 11 a. m, Nov. 18, for repairing the Ludlow St. Jail, located at 70 to 74 Ludlow St., Boro. of Manhattan, City of New York. Bernstein & Bernstein, 24 East 23d St., New York, are Archs.

Plans have been filed for the 12-story office building to be built from plans by Clinton & Russell, Archs., 32 Nassau St., on the plot owned by the Reformed Protestant Dutch Church at 123 to 133 William St. The structure will have a frontage of 130.4 ft. and a depth of 95.1 ft., and will cost $500,000. It is to be built for the Collegiate Realty Co., which has taken a long lease of the site from the Church.

Four 6-story tenement houses, for the special accommodation of tuberculosis sufferers, are soon to be built at an expenditure of $650,000, not including the cost of sites, by William K. Vanderbilt, on ground covering 18 city lots, bounded by the playground of Public School No. 158, in Ave. A, between 77th and 78th Sts., and by the John Jay Park, which extends from Ave. A to the East River, from 74th to 76th Sts. The plans for the building have been filed by Henry Atterbury Smith, Arch., 1181 Broadway. The tenement houses will be under the direction of Dr. Henry L. Shively of the Presbyterian Hospital Vanderbilt Clinic. Each will be 89.2 ft. deep. Two will have a frontage of 117 ft. and two will have a 108-ft. frontage. The buildings will be ornamented with brick fácades, finished with limestone and trimmed with terra cotta. There will be 16 suites for small families in each floor. The suites will be of two, three, four and five rooms. The buildings will accommodate from 350 to 375 families. The buildings will be fireproof and no fire-escapes will be used. Each suite will have a bathroom, and gas ranges will be used in the apartments.

NEW YORK, N. Y.—We are officially advised that Albert Morris, Arch., 103 Park Ave., is drawing plans for four 5-story non-fireproof apartment houses, 40 × 97 ft., to be erected at the southeast corner of 180th St. and Clinton Ave. for the Brook Construction Co., 60 Liberty St. The building will cost about $130,000. Contracts are being let by the owner, and those for steel ceilings, plastering, roofing, sheet metal work, dumb waiters, electric wiring, decorating, etc., are still open.

The general contract has been let to NEPTUNE B. SMYTH, 1123 Broadway, for the completion of the annex and addition and other alterations to the present fire headquarters building, 67th and 68th Sts., between Lexington and Third Aves., for the Fire Department. Nicholas J. Hayes is Comr. The plans are by Herts & Tallant, 113 East 19th St. Estimated cost, $100,000. Bids were received on Oct. 20.

Parish & Schroeder, Archs., 12 West 31st St., have filed plans with the Building Superintendent for enlarging the 4-story clubhouse of the Training School for Nurses of Bellevue, at 420 to 426 East 26th St., adjoining the hospital buildings, by the addition of a 6-story annex of an ornate Renaissance design of faced brick decorated with ornamental panel work, and having a balustrade at the roof. It will give the enlarged building a frontage of 100 ft. and will contain a large dining room and numerous sleeping chambers. The addition is to cost $120,000. The land upon which the present training school stands is owned by Mrs. William Church Osborn.

The carpenter contract has been let to GEORGE MULLIGAN, 33 East 32d St., for the theatre at Melrose Ave. and 149th St., the Bronx, for the American Real Estate Co., 537 Fifth Ave. The theater will be constructed of brick and stone, 100 × 75 ft. Cost, $300,000. William McElfatrick, 1402 Broadway, is the Arch. Percy Williams, 1135 Broadway, Lessee.

NEW YORK, N. Y.—Contracts were signed on Nov. 5 with the C. L. GRAY CONSTRUCTION CO., 42 Broadway, providing for the erection of a building that is to cost approximately $1,000,000 at the southeast corner of Broadway and 43d St., on the plot fronting 104 ft. on Broadway and 193 ft. on 43d St., that was acquired by the Broadway-Forty-third St. Building Co., by Greenwood & Co., 42 Broadway, from Mrs. Mary A. Fitzgerald a month ago. Mrs. Fitzgerald loaned the company $500,000 to finance the operation. Although construction work on the building will not be started for several months and plans are not yet completed, the building has been leased to Frank R. Tate for two periods of 21 years each, the payment the first 21 years to be at the rate of $100,000 annually, and for the second 21-year period $115,000 annually. The lease provides for four renewals of a like term, the payments to be based on a valuation of 4% on the property. An office building and a playhouse are to be erected on the plot. The theater will be in the rear of the office building. It will have a main entrance leading from Broadway through the office structure. It will have a seating capacity of 1,150, and will be built for and operated by the George Cohan Theater Co. That company has leased the playhouse for ten years at $52,250 a year. Samuel H. Harris, George M. Cohan

and Frank R. Tate, 214 West 42d St., compose the theater company. The office building to be erected on the site will cost $1,000,000. Mr. Cohan expects to have the theater ready for use next September.

The STANDARD ARCH CO., 415 East 31st St., has secured the contract for reinforced-concrete work on the two 12-story elevator apartment houses which the Carlyle Realty Co., 198 Broadway, will erect on the south side of Cathedral Parkway, 100 ft. west of Amsterdam Ave., from plans by Schwartz & Gross, 347 Fifth Ave., to cost together about $400,000.

NEW YORK, N. Y.—Killiam Tumbridge, proprietor of the St. George Hotel, Brooklyn Heights, has purchased the southwest corner of Henry and Pineapple Sts. from the heirs of the old Hurd Estate, A. O. Whitney and Louise W. Ladeu. Mr. Tumbridge is planning to erect an 8-story hotel on the site to be operated in connection with the present building. The hotel now covers about two acres of ground. The addition will cost $250,000.

Thain & Thain, 4 East 42d St., have prepared plans for a 5-story brick and limestone store and loft building, 25 × 100 ft., for Mrs. Anson R. Flower, 601 Fifth Ave., to be erected at 3 East 48th St. The architects will have charge of construction and will receive bids on the general contract at once. Redfern (Limited), 568 Fifth Ave., is the lessee.

Plans have been filed for a 5-story and basement restaurant for James Churchill on the southwest corner of Broadway and 49th St. The proposed building is to be of granite, limestone and brick, with terra cotta ornamentation, patterned in the Colonial style, with arched windows and decorative balconies, from designs by Herbert M. Baer, Arch., 542 Fifth Ave., and finished with a roof of tile. It will have a Broadway frontage of 78.9 ft. and a depth of 159.4 ft. The building is to cost $200,000.

A contract has been let to the A. PERLMAN IRON WORKS, 1735 West Farms Road, for the ornamental iron work on two 12-story elevator apartment houses for the Edendale Construction Co., 198 Broadway, to be situated at Riverside Drive and 79th St.

NEW YORK, N. Y.—Charles Scribner, 153 Fifth Ave., will erect a 6-story residence, 29 × 100 ft., at 9 East 66th St. Preliminary plans are being prepared by Ernest Flagg, Arch., 35 Wall St. The building will be fireproof and will cost $300,000.

A building, consisting of two wings and a tower, is to be erected at West and Washington Sts. by the Battery Place Realty Co. The wings will be 16 and 31 stories high, and the tower, which will connect the new structure to the present building, will have 36 stories. The structure will be fireproof, of brick, stone and terra cotta and will cost $4,600,000. Clinton & Russell, 32 Nassau St., are Archs.

NEW YORK, N. Y.—Bids are asked by John J. Barry until 11 a. m., Nov. 23, for furnishing all labor and material required to install a new heating system in the Second District Prison, Jefferson Market, Tenth St. and Sixth Ave., New York.

Bids are asked by Robert W. Hebberd, Comr. of Public Charities, until 2.30 p. m., Nov. 22, for furnishing all the labor and materials required for plumbing, drainage and gasfitting of the remodeled building, 124 East 59th St., Boro. of Manhattan, the City of New York.

Bids are asked by the Board of Health until 10 a. m., Nov. 23, for furnishing and delivering timber, lumber, molding, etc., to the tuberculosis sanatorium at Otisville, Orange County, N. Y., during the year 1909.

LAWRENCE (L. I.), N. Y.—Estimates are being taken by William Adams, 15 West 38th St., New York, Arch., for the proposed Nassau County school to be erected at Lawrence by the Board of Education. Estimated cost, $80,000.

HUGUENOT PARK, N. Y.—The Terra Marine Co., 500 Fifth Ave., New York, has had plans prepared by Hurd & Sutton, 15 Clinton St., Newark, N. J., for a 12-story and basement hotel, 83 × 83 ft. There will be two 4-story wings, with basements, 55 × 60 ft. The general contract has been let to the UNITED CONTRACTORS CORPORATION, 15 Exchange Pl., Jersey City, N. J. The building will be constructed of steel and concrete and will cost about $1,000,000.

ROCHESTER, N. Y.—Bids are asked by the State Commission in Lunacy until 3 p. m., Nov. 17, for rearrangement of water piping for fire service at the Rochester State Hospital at Rochester, N. Y. T. E. McGarr is Secy. of Comn., Albany.

ROCHESTER, N. Y.—We are officially advised that H. D. Whitfield, 160 Fifth Ave., New York, has completed revised plans and has taken new figures for a 2-story laboratory and Applied Science Building, 40 × 60 ft., for the Rochester University. Estimated cost, $50,000.

MOUNT VERNON, N. Y.—We are officially advised that the Mount Vernon Hospital Association will erect a fireproof hollow tile and brick hospital, three and four stories, 44 × 112 ft., at Mount Vernon, to cost $75,000. M. See & Son, 6 West 22d St., New York, are Archs. No contracts have been let, and it is probable that nothing will be done until spring.

The contract has been let to JOHN BORUP, of Mount Vernon, for the erection of the proposed Elks' building. It will be of brick and stone, costing about $50,000.

BUFFALO, N. Y.—Esenwein & Johnson, Archs., 777 Ellicott Sq., are completing plans for a stone and stucco residence, old English architecture, to be erected on Soldiers Pl., Bird and Windsor Aves., for E. M. Statler, proprietor of Statler's Hotel. Cost, $60,000.

BUFFALO, N. Y.—Robert J. Reidpath, Arch., 30 Builders' Exchange, is taking figures for masonry, fireproofing, carpentry and ornamental ironwork contracts for the Y. M. C. A. 8-story men's hotel at the corner of Pearl and West Genesee Sts. The foundation and structural steel contracts have been awarded.

COLD SPRING HARBOR (L. I.), N. Y.—The general contract for a residence to be erected for A. W. Stewart, 45 Wall St., New York, has been let to J. O. WHITENACK, 231 West 18th St., New York. The masonry contract has been let to DEMPSEY & HARDY, of Princeton, N. J. The building will be fireproof, 2½ stories high, of brick and stone and will be 100 × 40 ft. Cost, $50,000. F. C. Stewart, 103 Park Ave., New York, is Arch.

JERSEY CITY, N. J.—We are officially advised that a contract has been let to the TURNER CONSTRUCTION CO., 11 Broadway, New York, for a warehouse for the Dairymen's Mfg. Co., Warren St., Jersey City. The building will be 65 × 140 ft., five stories, and 102 × 32 ft., one story, of reinforced-concrete throughout. Work to be started at once. W. A. Tilton, 73 Montgomery St., Jersey City, N. J., is Arch.

The Phoenix Realty Co., 591 Summit Ave., Jersey City, is taking figures on the 3-story brick and limestone theater and office building, 71 × 171 ft., to be erected at Summit Ave. and Cottage St., to cost $150,000. W. E. McElfatrick, 1402 Broadway, New York, is Arch.

PRINCETON, N. J.—Cram, Goodhue & Ferguson, 15 Beacon St., Boston, Mass., are preparing plans for a 2 and 3-story graduating school, 200 × 100 ft., for Princeton University. The building will contain kitchen, dining-room and auditorium. It will be constructed of stone and brick and will cost $200,000.

BRYN MAWR, PA.—It is planned to erect at Bryn Mawr, on the corner of Lancaster Pike and Elliott Ave. a structure to be known as the Bryn Mawr Apartments. The building is a 4-story structure, designed by Henry L. Reinhold, Jr., Arch., McCaul Bldg., Philadelphia, Pa. It is to be built of brick and reinforced concrete. It will be fireproof construction throughout. The frontage on Lancaster Pike is 145 ft., and on Elliott Ave. 167 ft. The interior will be handsomely finished in hardwood. It will be heated by steam. The lighting will be electric. There will be a cleaning and refrigerating system in every kitchen, with gas and electricity for cooking. There will be twelve apartments on each of the first, second and third floors, each apartment consisting of five or six rooms and bath. The fourth floor will contain 16 apartments of two to six rooms each, with bath, kitchen, etc. The basement will contain storage room, laundries and servants' rooms. Each group of apartments will be provided with a brick fire tower and servants' stairways, with dumb waiters. Nearly all the apartments have sheltered porches. There will be one main entrance from Lancaster Pike, and two main entrances from Elliott Ave., as well as rear entrances. The building will be erected and operated by the Bryn Mawr Apartments Co., recently incorporated under the laws of Pennsylvania, with offices in the McCaul Bldg., Philadelphia, corner Tenth and Sansom Sts. The capital is $150,000.

KANE, PA.—Bids are asked by the Kane Trust & Savings Co. until 3 p. m., Nov. 15, for the erection of a 2-story bank building on Fraley St., Kane. James McDade is Pres.

PHILADELPHIA, PA.—H. E. Hess has obtained permits to build 121 2-story dwellings, each 15 × 42, with rear stores and dwellings of the same size, on Rosehill and Armes St., north of Ontario St., and on Tioga and B St. The cost of the operation will be $266,750.

The Roydhouse-Arey Co., Fidelity Bldg., has submitted the lowest bid on plans by Milligan & Weber, Archs., 520 Walnut St., for an 8-story brick and terra cotta apartment house, 66 × 94 ft., at the northwest corner of 22d and Chestnut Sts., for the Comber Estate. The building will contain 33 suites of apartments of four and five rooms. Its cost will be about $120,000.

Bids for alterations and extensions to the Philadelphia Hospital, to cost about $100,000, were received on Oct. 30 by Joseph S. Neff, Dir. of the Dept. of Health and Charities. The work will consist of an addition to the power plant and the installation of boilers and hot-water generators, boiler and equipment in laundry, corridor bridges between wards, four additional pavilions for female insane patients, addition to nurses' building, furnishing and installing an incinerating plat and erection of a building for the same. Philip H. Johnson, Arch., Land Title Bldg., has prepared the plans for the improvement. The bids will have to be scheduled before awards are made. The bidders are: John Wanamaker, Lit Bros., Snellenburg & Co., Babcock & Wilcox, Sax & Abbott, Edward R. Fay, American Laundry & Machine Co., Bernstein Mfg. Co., John R. Wiggins Co., Mitchell & Bros. and the Howard W. Read Co.

A contract has been awarded to J. G. DOAK & CO., 1420 Chestnut St., for a 2-story building, 50 × 20 ft., and for remodeling the factory at the southeast corner of 20th St. and Indiana Ave., recently purchased by S. Lubin. The cost of the work will be about $45,000.

PITTSBURG, PA.—See item under Water Supply—Irrigation.

LANSFORD, PA.—Benjamin R. Stevens, Arch., Bullitt Bldg., Philadelphia, has plans in preparation for St. John's Greek Church, to be built in Lansford, at a cost of about $40,000. The building will be of stone and brick, of Renaissance design, with two towers, 50 × 125 ft. in dimensions.

ARDMORE, PA.—Plans by Wilson Potter, Arch., 3 Union Sq. West, New York, for the proposed Lower Merion High School, to be built in Ardmore, have been posted by Wm. R. Dougherty, 1604 Sansom St., Philadelphia, for estimates. The building will be of cut stone, two stories and basement, 219 ft. 4 ins. by 69 ft. 4 ins., with an auditorium wing in the rear, 63 ft. 4 ins. by 72 ft. The building will contain a gymnasium under the auditorium, study halls, reference library, physical, biological and chemical laboratories, manual training, commercial and classical departments, cloak rooms, lunch rooms for students, superintendent's office and about 30 class rooms.

DEVON, PA.—THOMAS M. SEEDS, JR., 1207 Race St., Philadelphia, Pa., has a contract to erect residence to cost $600,000 for Clarence H. Clark on a plot recently purchased by him near Devon. It will be of stone, of the Colonial style, three stories in height, and will measure 50 × 100 ft. The house, which will be partly fireproof, will contain 50 rooms.

BALTIMORE, MD.—Isaac F. Emerson has purchased the Baltimore & Ohio lot on the corner of Baltimore and Calvert St., upon which to erect a 15-story hotel to cost about $1,000,000. The lot was the former site of the Baltimore & Ohio Building, which was burned during the Baltimore fire.

Under a decision reached on Nov. 3 the Pennsylvania R. R. Co. will build a passenger station in Baltimore to cost about $1,500,000. The station will be on the site of the present union terminal. It will be built primarily by the Northern Central Ry. Co., as the operating company, and will be used by Pennsylvania trains to and through Baltimore, as run by the Northern Central and the Philadelphia, Baltimore & Washington railroads, as well as by a few Western Maryland Railroad trains. At a meeting of the Board of Directors of the Northern Central Railway Co. on Nov. 3 the agreement with the city of Baltimore was approved and its execution was authorized. The plan for the new station selected by the special committee from among eight submitted in connection was approved. This committee consisted of H. Walters, Michael Jenkins, Norman James, T. N. Ely, James McCrea, Pres. P. R. R., Samuel Rea and W. W. Atterbury, with Wm. L. Bailey, as Advisory Arch. The successful architect is Kennth M. Murchison, Jr., 320 Fifth Ave., New York.

WASHINGTON, D. C.—Bids are asked by the District Commissioners, until noon, Nov. 15, for constructing a 4-room addition to the Monroe School building, located on Columbia Road, between Sherman and Georgia Aves., Block 6, Mt. Pleasant, D. C.

KINGWOOD, W. VA.—The Commissioners of Preston County, W. Va., have accepted the plans of Holmboe & Lafferty, of Clarksburg, W. Va., for the proposed court-house which is to be built of native stone and is to cost $200,000.

FAYETTEVILLE, N. C.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Fayetteville, N. C., to HOLLADY & CROUSE, of Greensboro, N. C., $53,635. Time, Nov. 15, 1910.

ALBANY, GA.—Bids were received as follows on Nov. 3 by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Albany, Ga.: Wills & Marvin Co., 1170 Broadway, New York, $98,945; John G. Unkefer & Co., Minerva, Ohio, $97,842; Gude & Co., Prudential Bldg., Atlanta, Ga., $97,383; Newport Contracting & Engineering Co., Newport News, Va., $101,728; D. J. Phipps, Newport News, Va., $104,500; Thomas H. Melton, Washington, D. C., $118,500; Charles McCaul Co., Philadelphia, $103,464; George Becking, Chattanooga, Tenn., $114,404. Time, Dec. 1, 1910.

*FORT MORGAN, ALA.—Bids are asked until 1.30 p. m., Dec. 10, by Capt. H. B. Chamberlin, Q. M., for the construction of two double sets of N. C. O.'s quarters and extension to ordnance repair shop at Fort Morgan, Ala.

LOUISVILLE, KY.—Bids are asked until noon, Nov. 13, by Samuel D. Jones, Business Dir. Louisville School Bd., for the erection and completion of a 16-room school building on East Broadway, according to plans and specifications prepared by Brinton B. Davis, Arch., Atherton Bldg., Louisville.

COLUMBUS BARRACKS (Columbus post-office), OHIO.—Bids are asked by Capt. H. J. Hirsch, Constr. Q. M., until 10 a. m., Nov. 26, for additions and alterations in converting Building No. 56 at this post into quarters for band, including plumbing, heating, electric light wiring and fixtures.

GREENVILLE, OHIO.—Bids are asked by the Board of Education of the Greenville City Schoool District, of the city of Greenville, Darke County, Ohio, at the office of Dr. W. T. Fitzgerald, Clerk, until noon, Nov. 24, for labor and material for the erection of the Henry St. Clair Memorial Building. Howard & Merriam, Capital Trust Bldg., Columbus, Ohio, are Archs.

CINCINNATI, OHIO.—The Cincinnati "Commercial-Tribune" states the question of constructing a union station here is under consideration. At a recent conference recently held at the Business Men's Club were the following: C. E. Schaff, Vice-Pres. of New York Central lines; T. C. Powell, Vice-Pres. of Q. & C.; Fairfax Harrison, Asst. to Pres. of Q. & C.; C. C. F. Bent, Gen. Mgr. of B. & O., representing Oscar G. Murray, Pres.; Joseph Wood, Vice-Pres. of Pennsylvania lines; R. C. Barnard, Gen. Supt. of Pennsylvania lines; Geo. W. Stevens, Pres. of C. & Q.; M. H. Smith, Pres. of L. & N.; F. H. Alford, Asst. to Pres. of C., H. & D.; E. A. Gould, Gen. Supt. of C., H. & D.; M. D. Maher, Vice-Pres. of N. & W.; Charles E. Roth, Pres. of Chamber of Commerce; C. H. M. Atkins, Pres. of Business Men's Club; W. S. Rowe, Pres. of First National Bank; J. G. Schmidlapp, Union Savings Bank & Trust Co.; Charles A. Hinsch, Pres. of 53d National Bank; E. R. Graham, Chicago; A. O. Elzner, City; Levi Goodale, and the Business Men's Club committee, comprised of H. R. Probasco, W. F. Robertson and H. D. Crane.

TOLEDO, OHIO.—We are officially advised that Gen. C. M. Spitzer has decided to erect the "Doctors'" building, between Tenth and Eleventh Sts., and that Bacon & Huber, Archs., Spitzer Bldg., Toledo, have prepared the plans. The contract is to be awarded about Nov. 17. The building will have a frontage on Madison Ave. of 200 ft., with an 85-ft. depth on Tenth and Eleventh Sts. It will be five stories, fireproof and cost about $150,000. The first floor will contain 16 shops, 15 × 50 ft., and the second, third, fourth and fifth floors will be divided into suites of two to seven rooms. The building is to be hot water heated, lighted by electricity and will have every convenience necessary for physicians, surgeons, dentists and specialists. The structure is to be built of brick, concrete and fireproofing, with an exterior of pressed brick and terra cotta. The interior will be finished in antique oak. Bacon & Huber expect to have the plans ready for bids at once.

HAMMOND, IND.—We are officially advised that bids were received by the Lake County Commissioners, at Crown Point, Ind., on Nov. 1, for additions, alterations, etc., at the court-house at Hammond. Charles A. Johnson is County Audr. The contract has been let to the REED-BUMP CONSTRUCTION CO., of Hammond. Beers & Beers are Archs., Orchestra Bldg., Chicago, Ill.

AUBURN, IND.—The Commissioners of Dekalb County have contracted with Mahurin & Mahurin, Archs., Swinney Block, Fort Wayne, Ind., for plans for a court-house. When plans are completed bids will be invited.

ELKHART, IND.—The Chicago, South Bend & Northern Indiana Ry. Co., of South Bend, Ind., has ordered plans for the construction of a freight depot in this city. The contract will be let as soon as plans are approved. Samuel T. Murdock is Gen. Mgr., Lafayette, Ind.

The School Commissioners are preparing to ask for bids for the erection of a large high school building.

INDIANAPOLIS, IND.—S. C. Carey has awarded a contract to C. L. HAMILTON, of Indianapolis, for the erection of a hotel on East Washington St.

PERU, IND.—The School Board will receive bids for the construction of a large school building. Guffin & Fair, Bass Block, Fort Wayne, Ind., are Archs. J. A. Faust is Secy. School Bd.

GARY, IND.—J. E. Hammons, Arch., is preparing plans for a flat building which he will erect at the southeast corner of Jackson St. and Eighth Ave. The building will front 59 ft. on Jackson St. and 59 ft. on Eighth Ave. and Jefferson Park and will contain eight flats. The apartments will consist of six rooms each, exclusive of corridors and bath room. The basement will be of Bedford stone, the first and second stories of Mission brick and the third story of pressed brick or stucco with stone trimmings. Space will be provided for a freight elevator in the rear. It is probable that a roof garden will be provided for the occupants. The foundation walls have been erected to the grade line and the owner expects to complete the building early next spring.

DETROIT, MICH.—Twenty acres have been purchased and $350,000 has been subscribed toward the erection of a $1,000,000 hospital at Hamilton and East Grand Boulevards. The site has a frontage of 964 ft. on the former and 900 ft. on the latter. The announcement of the plan is made by George H. Barbour on behalf of those associated with him in the project. The intention is to raise $500,000 before the building is begun. It is probable that two buildings will be erected at first with a comprehensive plan in view for future development of the institution. It will have accommodations for about 1,000 patients.

WINNETKA, ILL.—The Winnetka residence which has been designed by Marshall & Fox, Archs., First National Bank Bldg., Chicago, Ill., for Benjamin Allen, Pres. of Benjamin Allen & Co., 131 Wabash Ave., is to stand in the center of several acres of ground at Oak St. and Sheridan Road. The exterior of the structure, which is to be erected at a cost of considerably more than $100,000, will be faced with Bedford stone and the building is to be of fireproof construction throughout. The architectural design is that of an Italian villa. Work of erection will be started within a few weeks and the residence is to be ready for occupancy by next fall. The front of the residence will extend 136 ft. and it will be approximately 50 ft. in depth.

*DAVENPORT, IOWA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 15, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of an extension, remodeling, etc., to the U. S. post-office and court-house at Davenport.

ST. PAUL, MINN.—Bids are being asked by St. Adelbert's (Polish) congregation for the construction of a pressed brick and cut stone church to be built at Sherburne Ave. Rev. A. J. Major is Rector of the church. The architects are Boyer, Taylor & Lewis, city. The church will be of fireproof construction, with a seating capacity of 1,000 and will cost $50,000.

The State Board of Control, P. M. Ringdal, Chn., city, has rejected all bids for the construction of the 3-story pressed brick and cut stone girls' dormitory for the State University. The lowest bid exceeded the appropriation of $155,000. New bids will be taken. C. H. Johnston, Manhattan Bldg., is Arch.

LEAD, S. DAK.—James Knox Taylor, Supervising Arch. of the Treasury Dept., Washington, D. C., has rejected as in excess of the appropriation all the bids for the post-office at Lead, S. Dak.

FORT RILEY, KAN.—Bids are asked by Capt. W. M. Whitman, Constr. Q. M., until 10 a. m., Dec. 1, for construction and general repairs, and for plumbing, heating, and electric lighting work for three artillery barracks, Nos. 89, 91 and 93, at this post.

FORT YELLOWSTONE, WYO.—We are officially advised that the bids opened Oct. 7 for construction, plumbing, heating and wir-

ing of a guard-house at this post, have been rejected. This work will be readvertised on or about Feb. 1. Lt. G. C. Smith is Constr. Q. M.

ST. LOUIS, MO.—The St. Louis Provident Association will begin soon the construction of a $50,000 building at 2221 Locust St. Application has been made to the Building Commissioner for a permit and plans and specifications have been prepared by J. Hal Lynch, Delph Bldg., for the structure. The plans call for a 3-story brick building, 50 × 150 ft., and containing 50 rooms.

The Le Grand Jones Investment Co. will build an apartment house in the West End. The total investment will approximate $125,000. Plans and specifications for the structure have been prepared by L. Baylor Pendleton, Missouri Lincoln Trust Bldg. Work will begin in a short time. The structure will be erected on Skinker Road and Berlin Ave. and will contain twelve 6-room apartments. The exterior is to be of brick and terra cotta. The architecture will be in Colonial style. Each apartment will have a living room, 15 × 19 ft., with a large open fireplace for log fire. The baths will be finished in marble and tile. The exterior finish will be in white except the doors, which will be mahogany.

HOT SPRINGS, ARK.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 6, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of an extension, remodeling, etc., to the U. S. post-office at Hot Springs.

OKLAHOMA CITY, OKLA.—Bids are asked until 3 p. m., Dec. 9, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (except elevator, heating, gas piping and electric wiring and conduits) of the U. S. post-office at Oklahoma City, Okla.

SEATTLE, WASH.—The Jackson Estate, 1521 Eighth Ave., will build a 5-story concrete brick front apartment house, to cost $70,000.

C. D. Stinson has prepared plans for the erection of a 10-story fireproof modern office building, to be located on the northwest corner of Fourth Ave. and Union St. The building will cost $750,000 and work will be started next year.

SPOKANE, WASH.—We are officially advised that the Imperial Investment Co. has bought a site 82 × 110 ft. at the southwest corner of First Ave. and Cedar St., which will be improved with a 4-story building costing $60,000. The ground was bought from James Cronin and Charles Theis for $38,000. C. F. Clough & Co. made the sale. Andrew Laidlaw is principal owner and manager of the Imperial Investment Co. The property bought is described as Lots 1 and 2, Block 14, Browne's Addition. The corner lot is 32 ft. wide and the inside lot is 32 ft. wide. The average depth is 110 ft. Plans are being drawn for the building, which is to occupy the entire site. There will be stores on the first floor and about 100 rooms in the three upper stories, which will be used for a hotel. The building will be steam heated and all the rooms will have hot and cold water and large closets. L. L. Rand, The Rookery, Spokane, is Arch. Bids will be received about Nov. 20.

Plans are being prepared for the Wenatchee Realty & Investment Co. for the erection of a $50,000 apartment house on Wenatchee Ave. The building is to be constructed of concrete and will be 100 × 127 ft. and three stories high.

TACOMA, WASH.—The San Francisco "Chronicle" states that it was announced on Oct. 31 that two transcontinental roads have purchased deep-water terminals on Tacoma Harbor, between the terminal grounds of the Chicago, Milwaukee & Puget Sound Ry. and the western shore of the harbor. The announcement is made by Frank C. Ross. It is believed the railroads purchasing the terminal grounds are the Chicago & Northwestern and Canadian Pacific. E. C. Carter, Chicago, is Ch. Engr. C. & N. W. Ry. Co.; F. F. Busteed is Gen. Supt., C. P. R., Vancouver, B. C.

ASTORIA, ORE.—Plans and specifications have been received for a storehouse and office building to be erected here by the Standard Oil Co., 26 Broadway, New York. It will be built of brick, concrete and steel and be fireproof.

LOS ANGELES, CAL.—The Spreckels Bros. Commercial Co. will erect a 4-story warehouse building on Block C, Bigelow Tract, between Second and Third Sts., to cost $78,375. The ALTA PLANING MILL CO., Eighth and Alameda Sts., Los Angeles, Cal., has the contract. Perkinson & Bergstrom, Security Bldg., are Archs.

CARL LEONARD, H. W. Hellman Bldg., has secured the contract to erect a 4-story steel and concrete loft building on South Broadway, between Sixth and Seventh Sts., for the Co-Tenant Co. Contract price is $57,500. Dennis & Farwell, Currier Bldg., and Train & Williams, 254 South Broadway, are Archs.

Alexander Pantages, propiretor of Pantages Theatrical Circuit, has obtained a lease of 15 years on a building which William Garland will erect on Broadway, between Fifth and Mercantile Sts. The building will cost $400,000.

Ten acres of land lying between 40th St. and North Ave. and fronting 660 ft. on west side of Vermont Ave. have been purchased by City Board of Education as a site for a high school for which Parkinson & Bergstrom, Security Bldg., are preparing plans. The building will cost $245,000.

Construction of a 10-story office building to cost $800,000 to $1,000,000 at the northeast corner of Spring and Fifth Sts. will be begun in six months by the Chester Fireproof Building Co. A 50-year lease on property is held by the company. The property has a frontage of 95 ft. on Spring St. and 160 on Fifth St., and a width of 240 ft. on an alley in the rear. It has not been decided whether the building will be 95 × 160 ft., or will cover the entire lot. If the former, it will cost about $800,000, and if it occupies the whole area, the cost will be approximately $1,000,000. This and other matters pertaining to the building will be decided soon. Plans for the building have been prepared by Parkinson & Bergstrom, Archs., Security Bldg. In construction and appearance it will be similar to the Security Building, opposite on the south. The directors of the company are A. C. Bilicke, J. F. Sartori, James H. Adams, R. A. Rowan, M. S. Hellman, E. J. Marshall and J. S. Torrance.

LOS ANGELES, CAL.—An apartment building to cost $50,000 will be erected on the west side of Carondelet St., near Seventh St., by George L. Lovejoy, of Hollywood, Cal., on a lot 107½ × 122 ft., which he has purchased from Mary Kennedy.

Plans for a 3-story and basement frame and plaster apartment building to be erected at a cost of about $45,000 for Newerf Miller, of Covina, at Ninth and Grandview Sts., have been prepared by the Empire Construction Co., Laughlin Bldg. It will contain 100 rooms, with private bath for each apartment, and the equipment will include steam heating plant, electric elevators and telephone service in each apartment.

Plans have been prepared by Ye Planry and contract awarded to GEORGE HILLWIG for the construction for occupancy by the White Motor Car Co. of a garage on the west side of Flower St., between Pico and Twelfth Sts. It will have a frontage of 185 ft. and depth of 155 ft. A salesroom and offices will occupy the front of the building. The salesroom will have a tile floor, tile wainscot six ft. high and beam ceiling. There will be a machine shop, six pits and a crane, and the garage will be thoroughly equipped. The front of the building will be of glazed tile, trimmed with terra cotta and plate glass. The garage will be constructed for William Garldan, from whom it was leased for a term of years by George E. Cummings, Gen. Mgr. of the White Motor Car Co.

POMONA, CAL.—Plans for the proposed Polytechnic High School to be erected on High School grounds, prepared by Norman F. Marsh, Broadwell Central Bldg., Los Angeles, have been accepted by the local Board of Education. The plans provide for two separate buildings, which together will cost $50,000.

SAN FRANCISCO, CAL.—Plans have been completed for a warehouse building which is designed in what Wright, Rushford & Cahill, Archs., 571 California St., term the Spanish Colonial style. The building will stand at the southeast corner of Clay and Davis Sts., 75 ft. on Clay St. and 59.9 ft. on Davis St., with an L extension 59.9 × 25 ft. through the block to Commercial St. Piles are being driven for the foundation. Four stories are to be built now and two stories added in the future. There will also be a basement above the water line. The building will be of brick, with white cement fronts, and it will cost about $75,000.

The S. & H. Lachman Estate is arranging to erect a 3-story and basement building on the lot 137.6 × 137.6 ft. at the southwest corner of Market and Fremont Sts. Cunningham & Politep, Archs., Chronicle Bldg., have prepared plans for a building for business purposes, providing a number of small stores on both the Market St. and Fremont St. fronts on the lower floor. The two upper floors are to be subdivided into loft spaces, suitable for salesrooms, manufacturing and similar purposes. The plans provide a wide range for subdivision of the floors. The erection will be commenced soon. To cost about $125,000.

Plans have been prepared by Loring P. Rixford, Arch., for the Polytechnic High School which will include a group of buildings situated between Frederick, Willard and Carl Sts. There will be three buildings in all. The central structure will be 200 ft. long, with a depth of 140 ft. and will be four stories high with a basement. This central structure will be flanked by a 2-story building on either side which will be 60 × 60 ft. in dimensions. The shops for technical instruction will be housed in the 2-story structures. A gymnasium is included in the building scheme. It will be 56 × 90 ft. in ground dimensions. The sum of $600,000 was voted by the City for the construction and equipment of the school. The cost of the building is estimated a $500,000, leaving $100,000 for equipment. The frontage in Frederick St. will be 506 ft. The land runs through to Carl St., a distance of 275 ft.

SAN DIEGO, CAL.—The Globe Theater Co. has secured a 30-year lease on the northwest corner of Third and C Sts., it is stated, and will erect a theater building to cost $150,000.

TORONTO, ONT.—Bids are asked until 5 p. m., Nov. 22, by Napoleon Tessier, Secy., Dept. of Public Works, Ottawa, Ont., for additions and alterations to the general post-office building, Toronto.

WATER-SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply until 11 a. m., Nov. 24, for Contract No. 10, for the construction of the headworks of the Catskill Aqueduct, including the structure, for controlling, regulating and aerating the water leaving the Ashokan Reservoir, the principal of which are a lower gate-chamber, a screen chamber, an aerator, special and standard aqueducts in open cut, aggregating three-quarters of a mile in length; waste-weirs, a waste-channel, a concrete venturi meter and other appurtenances. J. Waldo Smith is Ch. Engr.

Bids were opened by the Board of Water Supply on Oct. 27 for Contract 31, for furnishing and installing four 48-in. controlling valves with expansion pieces, operating mechanism and appurtenances at the lower gate-chamber of Ashokan reservoir, near Brown's Station, in the town of Olive, Ulster County. Contract has been awarded, it is reported, to the OGDEN IRON & STEEL MFG. CO., 147 Cedar St., at $54,900.

NEW YORK, N. Y.—The following were bidders on Nov. 4 for furnishing all labor and materials required to install a new Croton pressure system, new salt water line, alterations and repairs to laundry equipment additions to steam lines in trench, etc., Harts Island: ALBERT WINTERNITZ, 237 East 27th St. New York, $16,400 (awarded contract); William Horne Co., $21,470; Blake & Williams, 211 West 20th St., New York, $23,597; Christopher Nally, 610 Amsterdam Ave., New York, $26,875; Robert R. Fox, $23,000.

ROCHESTER, N. Y.—Bids will be received by T. E. McGarr, Secy. State Comn. in Lunacy, Albany, until Nov. 17, for rearrangement of water piping for fire service at Rochester State Hospital.

MASSEPEQUA, N. Y.—See item under Light and Power Plants.

BAY SHORE, N. Y.—See item under Light and Power Plants.

NEWARK, N. J.—Morris R. Sherrard, Ch. Engr. and City Surveyor, has filed with the State Water Supply Commissioner at High Bridge, a new application for permission to increase its sources of water supply by acquiring the Wanaque watershed.

CONWAY, PA.—CHANDLER BROS., of Beaver Falls, have been awarded contract for constructing municipal water-works, at $18,051. Bids were opened on Oct. 11. James P. Leaf, of Rochester, Pa., is Engr.

PITTSBURG, PA.—The citizens voted on Nov. 2 to issue bonds as follows: Improvement of water system, $3,000,000; parks and playgrounds, $700,000; construction of bridges and sewers, $850,000; construction of Southern Ave. bridge, $75,000; freeing bridges, $300,000; tuberculosis hospital, $250,000; garbage and rubbish disposal, $100,000, and regrading and improving streets, $1,500,000.

PITTSBURG, PA.—Contract for pumping engine for the Southside pumping station, to be erected on Mission St., was awarded on Nov. 1 by the Department of Public Works to the BETHLEHEM STEEL CO., South Bethlehem, Pa., at $148,000. The engine will have a capacity of 7,000,000 gallons per day. Joseph E. Armstrong is Dir.

PHILADELPHIA, PA.—George R. Stearns, Dir. Pub. Wks., on Nov. 5 awarded contract to M. L. BAYARD, of Woodbine, N. J., for constructing the power plant of the Queen Lane filter station at $76,000.

READING, PA.—Bids were opened as follows by the Water Board on Nov. 2 for furnishing machinery and erecting it at the reserve pumping station at the Hampden reservoir: Lawrence Machinery & Supply Co., Arcade Bldg., Philadelphia, $9,445; Fairbanks, Morse & Co., 30 Church St., New York, $8,750.

WASHINGTON, D. C.—Bids were received as follows on Nov. 6, by the Bureau of Yards and Docks, Navy Department, Washington, for the construction of an additional artesian water supply system and connections at the naval proving grounds, Indian Head, Md.: Edward Christman, Massillon, Ohio, item 1, 2⅞ cts. per gallon; complete, $10,809.

RICHMOND, VA.—The Committee on Water on Oct. 29 awarded contract for supplying 20-in. pipe to be run from the Marshall reservoir to the pumping mains of the electric plant, about 5,700 ft., to the SOUTHERN RY. SUPPLY CO., of Richmond, at $10,680.

CUTHBERT, GA.—See item under Light and Power Plants.

PANAMA CITY, FLA.—The city contemplates the construction of water-works system. Estimated cost, $8,000. R. L. McKenzie is Mayor.

GREEN COVE SPRINGS, FLA.—The citizens have voted to issue $45,000 of bonds for water-works, new street and sidewalks and a municipal electric light plant.

KEY WEST, FLA.—Bids were received as follows on Nov. 6, at the Bureau of Yards and Docks, Navy Department, Washington, D. C., for the construction of a concrete cistern at the Naval Station, Key West: G. & W. Mfg. Co., 26 Cortlandt St., New York, (1) $22,931, (2) $22,700; Bryan & Co., Jacksonville, Fla., (1) $20,750, (2) $19,950; Schweirs & Sutton, 90 West St., New York, (1) $22,870; W. C. Pease, Atlanta, Ga., (1) $21,972; Snare & Triest, 143 Liberty St., New York, (1) $25,000; Piedmont Construction Co., Atlanta, Ga., (1) $23,750, (2) $22,000, $24,500.

GULFPORT, MISS.—M. F. Sullivan, City Engr., has prepared plans for the extension of the water system. Estimated cost, $34,000.

WEST ALLIS, WIS.—Contract for ten miles of water main has been awarded to the ADVANCE CONSTRUCTION CO., of Waukesha, at $1.11 per ft. Total cost, about $58,000.

EAGLE RIVER, WIS.—W. C. FRASER, of Rochester, Minn., has been awarded contract for furnishing material and laying about one mile of water mains at $9,500.

FOLEY, MINN.—Bids will be received until Jan. 1, readvertisement, by Frank J. Kotsmith, Village Recdr., for constructing a complete system of water-works. O. Claussen is Engr., National German American Bank Bldg., St. Paul. The City Council on Oct. 21 rejected bids for the above water-works as excessive. The lowest bid was that of O. F. Doyle, of St. Cloud, at $9,950. Estimated cost was $7,500.

ASHLAND, KAN.—See item under Light and Power Plants.

LUCAS, KAN.—Bids were opened, we are officially advised, on Oct. 26, for the construction of water-works and electric light plant. Contracts have been awarded as follows: To DES MOINES BRIDGE & IRON WORKS, Des Moines, Iowa, for Sections 1, 2, 3, 4 and 6; to FAIRBANKS, MORSE & CO., 1219 Union Ave., Kansas City, for Section 5; to B.-R. ELECTRIC CO., Fifth and Delaware Sts., Kansas City, Mo., for Section 7; to D. C. JONES, Kansas City, for Section 8. J. S. Worley Co., Reliance Bldg., Kansas City, are Engrs.

WOLBACH, NEB.—John Early, of Columbus, Neb., has been engaged as engineer for the proposed water-works. Estimated cost, $8,500. Contract will probably be let in December.

BELDEN, NEB.—We are officially advised that bids for the construction of the water system for this place were opened on Nov. 4. All general contract bids were rejected. The bid of the OTTO GAS ENGINE WORKS, covering a 21-HP. gasoline engine was accepted. The bid of JAMES B. CLOW & SON, covering c.-i. pipe, valve, boxes for same, hydrants, indicator posts and stands for same and special castings was accepted. All other bids were rejected. Bids are asked until 1.30 p. m., Dec. 15, for the following: Stand-pipe and foundation for same, the installation of the pipe, valves, hydrants, etc., and the well, which is an open one, and the pump for same, which is a triplex deep well pump. F. B. Barber is Village Clk.

RAPID CITY, S. DAK.—The Katz-Craig Construction Co., Omaha, Neb., was the lowest bidder on Oct. 29 for the installation of a gravity water system at the Rapid City Indian School.

DAYTON, WYO.—The KATZ-CRAIG CONSTRUCTION CO. has been awarded contract at $14,000 for the construction of a new water-works system for this city. Bids were opened on Oct. 23.

GLENDINE, MONT.—The Secretary of the Interior has authorized the Reclamation Service to execute contract on behalf of the United States with HENRY DORE, of Ridgelawn, Mont., for the excavation of about 6,000 cu. yds. of material for a wasteway channel in connection with the Lower Yellowstone irrigation project, Montana-North Dakota. The contractor is to be paid at the rate of 19½ cts. per cu. yd.

KANSAS CITY, MO.—The Board of Fire and Water Commissioners on Oct. 28 awarded contract for the erection of a 25,000,000-gallon centrifugal pump at Quindara pumping station to the ALLIS-CHALMERS CO., Milwaukee, Wis. Bids were opened on Oct. 21. List of bidders noted on Nov. 4.

FAYETTEVILLE, ARK.—The City Council on Oct. 28 voted to lay pipe to Clear Creek, four miles distant and install a water plant there. Estimated cost, $24,000.

CISCO, TEX.—The city has awarded contract to FENDER BROS., Kaufman, Tex., to install water clarifying plant at Lake Bernie.

HOMINY, OKLA.—The citizens voted on Oct. 20 to issue bonds for $25,500 for water-works and $10,500 for sewers. L. Y. McFarland, of Dewey, Okla., is Engr.

COLLINS, OKLA.—The citizens on Oct. 26 voted to issue $37,500 of bonds for water-works and sewers.

SAPULPA, OKLA.—The City Council on Oct. 27 awarded contract to HARPER & GOODWIN, Kansas City, Mo., to superintend the construction of water-works. Estimated cost, $200,000.

BLACKWELL, OKLA.—See item under Light and Power Plants.

GREELEY, COLO.—Allison D. Smith, of Greeley, and Cornelius A. Clark, of Berthoud, are reported to have filed a map of the Greasewood intake ditch. Estimated cost, about $320,000. The ditch will cross the east bank of Crow Creek. The Larimie County, the Larimie and Weld ditches and Greeley Canal No. 2 will be extended so as to discharge the waters of those creeks above the head of the Greasewood intake into Crow Creek, thus supplying the inlet to Greasewood reservoir from the Greeley-Poudre.

DENVER, COLO.—Plans for the Kindred Power & Irrigation Co.'s reservoir and ditch have been filed with the State Engineer. The site of the reservoir is in Routt County and the supply of water will come from Bear River. The dam, which will be necessary to the project, is to be 175 ft. high and will cost $350,000. The reservoir will hold 30,860,400,000 cu. ft. of water. Work on the project was begun in August, 1909, and it is expected that $600,000 must be expended to carry it through.

TACOMA, WASH.—Contract for laying water mains in Alliance, Ainsworth, Woodruff and Central additions has been let to TIGNAMELLI & PAINI at $15,986. Six bids were received. The estimate of cost was $17,483.

CATHLAMET, WASH.—Bids will be received by the City Clerk until 10 a. m., Nov. 30, for furnishing all material and labor for the construction of the completion of the city water system in accordance with the plans and specifications filed with the City Clerk.

PASADENA, CAL.—The City Council has engaged A. L. Sonderreger, of Los Angeles, to prepare plans for a distributing system and for additional sources of water supply.

ST. GEORGE, UTAH.—Application for water to irrigate 1,000 acres of land in Washington County has been filed with the State Engineer by V. A. Tanney, of St. George. It is proposed to utilize a flow of 10 cu. ft. of water from Quail or Harrison Creek by means of a rock and cement dam and a diverting channel 18,000 ft. long, 12 ins. wide, with a grade of 5.28 ft. per mile.

SALT LAKE CITY, UTAH.—The Northwest Co., Dearborn St., Chicago, Ill., has filed with the State Engineer an application for the appropriation of 1,000 cu. ft. per sec. of the waters of Price River in Emery County. The diverting works will consist of dam tunnels, canals, flumes and pipes. The length of the diverting channel will be 300,000 ft. The dam will be 600 ft. long, 140 ft. high and will impound 65,000 acre-ft. of water. Each filling may be refilled a number of times each year. Quantity of acre-ft. of water to be appropriated, 210,000.

WEISER, IDAHO.—The Weiser Land Co. has awarded contract for construction of dams, flumes, ditches and rock work for the reclamation project at Council to SLICK BROS. at about $300,000.

HULL, QUE.—Bids are asked until 4 p. m., Dec. 6, by John F. Boult, City Clk., for the construction and erection of one set of Duplex or triple power pumps, capacity of 6,000,000 U. S. gallons per day; likewise turbine wheels for operation of same. R. W. Farley is City Engr.

PORT ARTHUR, ONT.—M. J. HOGAN has secured contract for a pumping well, 25-ft. diameter, and for laying 1,300 ft. of 20-in. steel pipe at $7,300. J. Antonison is City Engr.

SEWERAGE.

(* *denotes that this work is advertised in Engineering News.*)

NEW YORK, N. Y.—Contracts for the construction of sewers, bids opened on Oct. 19 by John F. Ahearn, Pres. Boro. Manhattan, have been awarded as follows: For barrel sewer and appurtenances under pier at foot of 26th St., East River, to JOHN D. WALSH, at $6,334; for furnishing all the labor and material required for alteration and improvement to sewer and appurtenances in 119th St., between Third and Park Aves., to GRANNIS & COOK, at $9,263.

*ROME, N. Y.—We are officially advised that bids were received on Nov. 1 by the Managers of the Rome State Custodial Asylum, Rome, for the construction of a sewage disposal plant here: Scott & Gleason, Ilion, N. Y., $6,800; Carey Construction Co., Rome, N. Y., $9,827; C. T. Hookway, Syracuse, N. Y., $8,874; The A. E. Stephens Co., Binghamton, N. Y., $7,700; Thomas & Watkins, Woodbury, N. J., $11,629; New York Sewage Disposal Co., New York, $8,561; Antonio Rienzo, Rome, N. Y., $13,388; Wing & Rexinger, Buffalo, N. Y., $7,600; Remo Perretela & Co., Utica, N. Y., $7,798; Rome Construction Co., Rome, N. Y., $10,073.

BINGHAMTON, N. Y.—John A. Giles, City Engr., has completed plans for the Helen St. sewer providing for the construction of a sanitary and storm water sewer from the present Fourth Ward trunk sewer to Delaware Ave.

ROCHESTER, N. Y.—The Common Council on Oct. 26 adopted ordinances providing for the construction of sanitary and storm water sewers in Humboldt and Marion Sts. Estimated cost, $25,000. Also for the construction of a similar system in University Ave. Estimated cost, $14,000.

BUFFALO, N. Y.—F. G. Ward, Comr. Pub. Wks., on Oct. 30, opened bids for the removing of the present trunk sewer outlet and the construction of a new trunk sewer outlet under the Black Rock harbor and channel at the foot of Albany St. This work must be done under the requirements of the United States government. There were five bidders. The lowest was the Buffalo Dredging Co., D. S. Morgan Bldg., at $110,000. The other bidders were: Busch & Percival, $145,000; the Eastern Concrete Steel Co., $144,349; William Franklin, $140,000; Joseph F. Stabell & Co., $118,644.

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Nov. 24, by Bird S. Coler, Boro. Pres., for constructing a sewer in 20th St. between Terrace Pl. and Tenth Ave.

*SUMMIT, N. J.—We are officially advised that MIELE & BRUNO, 142 Mount Pleasant Ave., West Orange, N. J., was awarded contract on Nov. 3 by the Common Council for the construction of a sewer in Pine Grove Ave., at $9,000. All bids for the sewer in Hillcrest and Summit Aves. were rejected and new bids are asked until 8 p. m., Nov. 16. John S. Stiger is City Engr.

PLAINFIELD, N. J.—North Plainfield plans to build a sewage disposal system jointly with the Borough of Dunellen. Estimated cost, $270,000. An exhaustive report with this recommendation was made by the Borough Sewage Commission's special committee at the regular meeting of the North Plainfield Council on Nov. 2. The committee, consisting of W. J. Buttfield, Joseph O. Osgood and C. L. Nicholas, recommended that land 3,500 ft. west of the Warrenville Road, just outside the borough, be acquired for the disposal beds, and that a formal agreement be entered into with Dunellen, whose authorities have expressed a willingness to become a party to the undertaking. The Council accepted the report and decided to go ahead with the plans.

MORRISTOWN, N. J.—Bids are asked until 11 a. m., Nov. 17, by the Board of Sewerage for sewer work.

TARENTUM, PA.—The State Health Commissioner, Harrisburg, has approved plans for a combined trunk sewer line and sewage disposal plant, for the Boroughs of Tarentum and Brackenridge, the two boroughs to divide the expense of construction.

PITTSBURG, PA.—See item under Water Supply—Irrigation.

PITTSBURG, PA.—Bids are asked by the city until 10 a. m., Nov. 18, for sewers in various streets. Joseph G. Armstrong is Dir. Pub. Wks.

MANCHESTER, VA.—C. P. E. Burgwyn, Consulting Engr., 917 Bank St., Richmond, estimates that the sewer system to be constructed at Forest Hill will cost about $25,000.

BIG STONE GAP, VA.—The citizens on Oct. 26 voted to issue $4,000 of bonds for the construction of sewers.

ROANOKE, VA.—R. M. BIBB & CO., Roanoke, Va., have been awarded contract, at $5,094, for constructing sewers in 13th St. and 17th St. Bids were opened on Oct. 28.

ANDREWS, N. C.—The city has decided to construct a sewerage system. H. N. Wells is Mayor.

DUBLIN, GA.—The city has voted $40,000 of bonds for the construction of a sewer system.

TUSCALOOSA, ALA.—The citizens on Oct. 26 voted to issue $25,000 of bonds for the construction of sewers.

*LOUISVILLE, KY.—Bids are asked until noon, Nov. 26, by the Commissioners of Sewerage for the construction of the Jefferson St. sewer, Contract 57. For details see advertisement in this issue. J. B. F. Breed is Ch. Engr. Harrison P. Eddy is Consulting Engr., 14 Beacon St., Boston, Mass.

COLUMBUS, OHIO.—See item under Streets and Roads.

TOLEDO, OHIO.—Bids will be received until noon, Nov. 16, by the Board of Public Service, Reynold Volt, Secy., for constructing sewers in Horace St. and Foraker Ave.

UPPER SANDUSKY, OHIO.—THOMAS F. HURLEY, Marion, Ohio, has been awarded contract, at $3,088, for constructing a storm and sanitary sewer in this city. The work includes the building of about 3,140 ft. of 8-in. sewer. A. H. Stutz is Clk. Bids were opened Oct. 27.

WARREN, OHIO.—Alexander Potter, Consulting Engr., 116 Liberty St., New York, has estimated the cost of constructing sewers, storm and sanitary, here, at $220,875.

AKRON, OHIO.—Bids are asked by the Board of Public Works until noon, Nov. 16, for the construction of a sewer in Francis Ave., from Schiller Ave. to Rider Ave., with all the necessary catch basins, lamp holes, manholes, ventilators and appurtenances. Roy F. Hamlin is Secy.

CLEVELAND, OHIO.—Plans for the extension of the E. 26th St. sewer are now being prepared in the office of the City Engineer.

GREENFIELD, IND.—Bids will be received by the Commissioners of Hancock County until 10 a. m., Dec. 6, for the construction of a sewer system. Charles H. Troy is County Audr.

TERRE HAUTE, IND.—Contracts for sewers were awarded by the city on Oct 19 as follows: To M. McBRIDE, for sewers in Eleventh, 20th and Ash Sts., at $6,150; to W. H. HARRIS, for sewers in Eleventh and Twelfth Sts. and Washington Ave., at $3,-700; to W. J. EILER, for sewers in Seventh St., at $3,500, and to O'LEARY & SON, for sewers in Lafayette Ave., at $5,900.

AUBURN, IND.—It is proposed to construct a sewer system here. Estimated cost, about $85,000. J. F. McDowell, of Auburn, is Engr.

GARY, IND.—Bids are asked until 2 p. m., Nov. 16, by the Board of Trustees for the construction of district sewer No. 4. C. O. Holmes is Clk.

SPRINGFIELD, ILL.—Following sewer contracts have been awarded by Board of Local Improvements: New St., Lawrence Ave. to Edwards St., to JOHN W. RYAN, at 63 cts. per lin. ft. for 18-in. sewer, 36 cts. for 12-in. sewer and $22 for manholes; Lawrence Ave. sewer, from 21st to Elm Sts., to RICHARD EGAN, at 64 cts. for 18-in. sewer, 36½ cts. for 12-in. sewer and $21.25 for manholes; Lawrence Ave. pavement, Monroe to Lawrence Ave., to JOHN BRETZ, at $1.50 per sq. yd. for brick pavement and 40 cts. per lin. ft. for curbing and gutters.

CHICAGO, ILL.—Bids are asked by the Board of Local Improvements until 11 a. m., Nov. 15, for the construction of sewers in various streets. Charles A. V. Standish is Secy.

DANVILLE, ILL.—See item under Streets and Roads.

PORTAGE, WIS.—The Common Council has awarded contract for the construction of the sewer system to D. J. CHRISTOPHER, of Chicago, Ill., at $48,286.

TWO RIVERS, WIS.—WALTER O. BAHR has been awarded contract by the city, bids opened on Oct. 20, at $4,200, for laying 3,800 ft. of sewer pipe on the East Side, ranging from 15 to 8 ins. in diameter, and five flush tanks and eight manholes.

BETTENDORF (Davenport post-office), IOWA.—The PEOPLE'S CONSTRUCTION CO., Davenport, Iowa, has been awarded contract by the Town Council, at $16,297, for constructing a sewer system and septic tank disposal plant. Bids were opened on Oct. 25.

TAMA, IOWA.—Plans are being prepared by Prof. Marstons, Consulting Engr., Agricultural School, Ames, Iowa, for constructing a sewer here.

LAKE CITY, IOWA.—NELS JENSEN, of Newell, has been awarded contract by the city for the construction of about 3,325 ft. of 10 to 18-in. sewer, including a flush tank and sewage tank, bids opened on Oct. 18, at about $4,500.

TRAER, IOWA.—Bids are asked until 8 p. m., Nov. 29, by the city for the construction of about three miles of from 8 to 15-in. sanitary sewers. Charles P. Chase, Clinton, Iowa, is Engr.

SHAKOPEE, MINN.—FRASER & DANFORTH, Rochester, Minn., have been awarded contract, at $6,198, for furnishing all materials and labor for the construction of a general and division sewer as authorized in Ordinance No. 84. The work includes about 6,000 lin. ft. of 8, 10 and 15-in. sewer from 6 to 12 ft. deep.

CANBY, MINN.—Plans have been completed by John Wilson, of Mankato, Minn., Consulting Engr., for constructing a sewerage system here. Estimated cost, $20,000. Bids will be received after Jan. 1, 1910.

GARNETT, KAN.—Plans have been prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for the construction of vitrified, concrete and brick sewers. Estimated cost, $30,000. M. D. Pilkington is City Clk.

OSWEGO, KAN.—Contract for constructing a sewer system here, bids opened on Oct. 23, has been awarded to ALEX. McORTH, of Oswego.

*WICHITA, KAN.—We are officially advised that bids were received as follows on Oct. 25 by the city for the extension of eight laterals of storm water sewer No. 5: John Chain, Wichita, $40,324; John Striffler, Springfield, Ill., $43,194; M. M. McKee, Wichita, $40,304; McIntire & Teese, Wichita, $40,324. These laterals are to be constructed in 16th, 15th, 14th, Murdock Ave., Hunter and Fannie Aves., Indianapolis Ave. and Lincoln St. Contracts were awarded as follows: To JOHN M. CHAIN for 16th, 15th, 14th, Murdock Ave. and Lincoln St. laterals; to M. M. McKEE, for Indianapolis Ave lateral; to McINTIRE & TEESE for Hunter and Fannie Ave. laterals. Bert C. Wells, City Engr.

HASTINGS, NEB.—H. C. GARDNER, of Lincoln, Neb., has been awarded contract by the Council for laying 15,293 ft. of sewer here, at $11,290, $630 less than the next lowest. Eight bids were received.

MANDAN, N. DAK.—It is proposed to construct a sewer system here.

HOMINY, OKLA.—See item under Water Supply—Irrigation.

ADA, OKLA.—Bids are asked by the city until Nov. 15 for the construction of lateral sewers in districts Nos. 1 and 2. W. B. Jones is City Clk.

OKLAHOMA CITY, OKLA.—Bids are asked by the city until Nov. 15 for constructing Kate Ave. storm sewer system, Kelly and Laird Aves. storm sewer system, East Side main sanitary sewer system, and lateral sewer in Riverside Addition, South Park Addition and South Riverside Addition. Bob Parman is City Clk.

DENVER, COLO.—Bids will be received until Nov. 26 by the Board of Public Works, W. B. Lowry, Pres., for constructing district sewers, submains, etc., at West and South Side sanitary sewer district.

TACOMA, WASH.—The WELLS CONSTRUCTION CO. has secured contract, it is stated, for a sewer in district No. 161, at $8,206.

VANCOUVER BARRACKS (Vancouver post-office), WASH.—Bids are asked by the Constructing Quartermaster, U. S. A., until 11 a. m., Dec. 1, for the construction of sewer laterals, flush tank and manholes on the rear line of the officers' quarters at this post.

COLUSA, CAL.—The Board of Trustees awarded contracts on Oct. 18 for the installation of the sewer system as follows: To SCOTT & FOLEY, of Berkeley, for labor and putting in system, $13,995; COLUSA LUMBER CO., cement, $2,128; MADDOX & CO., Sacramento, sewer pipe and materials, $11,-684.

MONTREAL, QUE.—Bids are asked until noon, Nov. 15, by the City Clerk, for the construction of a 5-ft. circular sewer in Sherbrooke St., Fifth Section from Victoria to Drummond Sts. John R. Barlow is City Surv.

HAMILTON, ONT.—The cost of the west end sewer and disposal works has been estimated at $110,000.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—J. B. O'ROURKE & CO. have secured the contract for paving South Market St., at $12,352. The contract for paving Corbett St. with macadam has been awarded to JAMES H. McCARTHY, at $5,-424.

NEW YORK, N. Y.—The following bids were received on Nov. 3 by Bird S. Coler, Pres. Boro. of Brooklyn, for regulating and repaving with asphalt pavement on a concrete foundation the roadway of the following streets and avenues, and all the work incidental thereto: Elton St., from Jamaica Ave. to Fulton St.: Borough Asphalt Co., 509 First St., Brooklyn, $8,839; Barber Asphalt Paving Co., 30 Church St., New York, $9,442; Cranford Co., 59 Ninth St., Brooklyn, $10,093; Uvalde Asphalt Pavement Co., 1 Broadway, New York, $9,200. Linwood St., from Jamaica to Atlantic Aves.: Borough Asphalt Co., 509 First St., Brooklyn, $13,-396; Barber Asphalt Paving Co., 30 Church St., New York, $14,289; Cranford Co., 59 Ninth St., Brooklyn, $15,317; Uvalde Asphalt Pavement Co., 1 Broadway, New York, $13,-955. Tenth Ave., from Bay Ridge Ave. to 75th St.: Brooklyn Alcatraz Paving Co., 407 Hamilton Ave., Brooklyn, $11,800; Barber Asphalt Paving Co., 30 Church St., New York, $13,223; Cranford Co., 59 Ninth St., Brooklyn, $12,982; Uvalde Asphalt Pavement Co., 1 Broadway, New York, $12,000. Wyona St., from Jamaica to Atlantic Aves.: Borough Asphalt Co., 509 First St., Brooklyn, $6,703; Barber Asphalt Paving Co., 30 Church St., New York, $7,164; Cranford Co., 59 Ninth St., Brooklyn, $7,639; Uvalde Asphalt Pavement Co., 1 Broadway, New York, $6,974.

NEW YORK, N. Y.—Contracts have been awarded by John F. Murray, Pres. of the Boro. of the Bronx as follows: For paving with asphalt blocks on a concrete foundation the roadway of Arthur Ave., from 175th St. to Tremont Ave., and setting curb where necessary, to HASTINGS PAVEMENT CO., 25 Broad St., for $10,555; the roadway of Crotona Park East, from Crotona Park South to the Southern Boulevard, and setting curb where necessary, to HASTINGS PAVEMENT CO., for $33,825; the roadway of Mosholu Parkway south from Webster Ave. to Briggs Ave. and setting curb where necessary, to HASTINGS PAVEMENT CO., for $17,884; the roadway and sidewalk of the bridge over the New York, New Haven & Hartford Railroad (Harlem River Branch), at East 156th St., to BARBER ASPHALT PAVING CO., 50 Church St., for $1,778; the roadway of St. Pauls Pl., from Webster Ave. to Fulton Ave., and settting curb where necessary, to HASTINGS PAVEMENT CO., for $16,291; for repaving with asphalt blocks on a concrete foundation the roadway of Tinton Ave. (Beach Ave.), from East 152d St. to Westchester Ave., and settting curb where necessary, to HASTINGS PAVEMENT CO., for $8,843; for paving with asphalt pavement on a concrete foundation the roadway of Whitlock Ave., from Longwood Ave. to Tiffany St., and setting curb where necessary, to BARBER ASPHALT PAVING CO., for $8,059; for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches, drains, etc., and placing fences in Bronx Boulevard, from Bronx and Pelham Parkway to Burke Ave., to J. B. MALATESTA, 3169 Rome Ave., for $53,662; in Cannon Pl., from Giles Pl. to West 238th St., to HARRY SWIDEN, for $10,274; in Castle Hill Ave., from West Farms Road to the public place, its southerly terminus, and also setting curbstones, flagging the sidewalks and laying crosswalks, from West Farms Road to Lafayette Ave., to J. B. MALATESTA, for $76,18[illegible]; in Hawkstone St., from Walton Ave. to the Grand Boulevard and Concourse, to A. CEBRELLI, Jerome Ave. and Clark Pl., for $1,022; in Kingsbridge Ave., from West 2[illegible]th St. to Broadway, to McDONALD & BARRY, Webster and Tremont Aves., for $55,2[illegible]; in Merriam Ave., from Ogden to Aqueduct Aves., to A. CEBRELLI, for $31,075; in 231st St., from Bailey to Riverdale Aves., to McDONALD & BARRY, for $70,661; in Rosewood Ave. (Locust Ave.), between White Plains Road and Cruger Ave., to L. J. MORAN, for $1,435; in St. Lawrence Ave., from West Farms Road to Westchester Ave., to W. F. MURRAY, for $18,037; in Wales Ave., from 141st St. to St. Joseph St., and in East 142d St., from Powers Ave. to Southern Boulevard, to F. V. SMITH CONTRACTING CO., 147 East 125th St., for $28,189.

Contracts awarded by the Park Commissioners are as follows: For work and materials required for the erection and completion of a bridge at Shore Road and First Ave., in the Boro. of Brooklyn, to HERBERT L. BROWN & CO.; for regulating, grading and paving or repaving with asphalt pavement on a concrete foundation the roadway of Parkside Ave., between Flatbush Ave. and Park Circle, Boro. of Brooklyn, together with all the work incidental thereto, to BROOKLYN ALCATRAZ ASPHALT CO., 407 Hamilton Ave., Brooklyn, for $28,813.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Nov. 24, for regulating, grading and paving various streets in Brooklyn.

Bids are asked by John F. Ahearn, Pres. Boro. of Manhattan, for regulating and repaving various streets in Manhattan; also for flagging sidewalks.

FT. H. G. WRIGHT (New London, Conn., post-office), N. Y.—JOSEPH BERVENNI, of New London, Conn., has secured the contract for constructing roads, walks, etc., at Ft. H. G. Wright, at $5,670.

NEWARK, N. J.—The Board of Public Works has awarded the contract for paving South Canal St. with granite blocks to the JERSEY PAVING CORPORATION, Union Bldg., Newark, at $9,458.

HAMBURG, PA.—We are officially advised that bids were received on Nov. 1 by Frank Tobias, Boro. Secy., for brick paving, concrete curb, concrete sidewalk and rubble masonry retaining wall. The contract has been awarded to JOSEPH O. SHERAY, of Wyomissing, Pa., at $1.95 per sq. yd. for paving and $4 per cu. yd. for the retaining wall. W. H. Dechant, of Reading, Pa., is Engr.

PITTSBURG, PA.—Bids are asked until 10 a. m., Nov. 18, by Joseph G. Armstrong, Dir. Dept. of Public Works, for paving with repressed vitrified brick, Class A, Larkin Alley, from South 19th to South 23d Sts.; Wrights Alley, from South 17th to South 20th Sts. Repaving wih block stone, Class D, Fisk St., from Butler St. south.

Contracts have been let for the improvement of five county roads by the County Commissioners and County Controller. HENRY BOLAR received the contract for the Lock No. 3 and Elkhorn brick road, his bid of $83,327 being the lowest of 15. The contract for the Greensburg Pike, also a brick road, was awarded to the COLLINS-GORDON CONTRACTING CO., 407 Fourth Ave., at $88,361, the lowest of nine bids. The same firm was the lowest bidder for the Braddock-Greensburg connecting road No. 1, also of brick, and was given the contract for $22,-795. The Noblestown Extension No. 2, revised location, macadamized, was awarded to McLAUGHLIN CONTRACTING CO., 223 Fourth Ave., for $13,672, the lowest of seven bids. Foley Bros., Rochester Road, submitted the lowest bid, $26,538, on the Dravosburg extension, concrete roadway, which was held up for one week. The contract for this brick road was awarded to COLLINS-GORDON CONTRACTING CO., at $36,092, the lowest of seven bids.

PITTSBURG, PA.—See item under Water Supply—Irrigation.

ROANOKE, VA.—Bids will be received by W. L. Craft, City Clk., until Nov. 17, for constructing granolithic sidewalks. F. L. Gibboney is City Engr.

CHARLESTON, S. C.—Bids were received as follows on Nov. 6, by the Bureau of Yards and Docks, Navy Department, Washington for paving the Navy Yard, Charleston, S. C.: R. E. Boiseau, 1219 Wisconsin Ave., Washington, (1) $3.40, (2) $1.25; P. D. Hay, 39 Bee St., Charleston, (1) $2.99, (2) 49 cts., (3) 20 cts.; Simons & Mayrant, 16 Broad St., Charleston, (1) $3.45, (2) 61 cts., (3) 20 cts., (5) 20 cts., (6) 40 cts.; Alsop & Pierce, First National Bank Bldg., Newport News, Va., (1) $3.24, (2) 95 cts.; Atlantic Bitulithic Co., 413 Mutual Bldg., Richmond, Va., (5) $2.20; Bowe & Page, 50 Wentworth St., Charleston, (1) $2.78, $2.77½, $2.54, (2) 59 cts., (3) 35 cts.

GREEN COVE SPRINGS, FLA.—See item under Water Supply—Irrigation.

BATON ROUGE, LA.—Bids were received Oct. 21 for about 28,000 sq. yds. of paving, and the contract has been awarded to the SOUTHERN BITULITHIC CO., of New Orleans, at $1.90 per sq. yd. R. Swart is City Engr.

LAKE PROVIDENCE, LA.—Bids will be received by the Mayor until Nov. 15, for constructing two miles of concrete sidewalks.

OAKLEY (Cincinnati post-office) OHIO—Bids are asked by the Village Council, Oakley, Ohio, at the office of Oscar Kosche, until noon, Nov. 16, for furnishing all the material and labor necessary in and about the improvement by grading and macadamizing the roadway, constructing cement combined curb and gutters, constructing drains, etc., the following streets in said village: Kline St., from Addie St. to Gerard Ave.; Addie St., from Kline St., to Russell Ave.; Dawson Ave., from Columbia Road to Locust St.; Pollet Ave., from Columbia Road to Ebersole Ave.; Carpenter Ave., from Columbia Road to Ebersole Ave.; Clark St., from Madison Road to Webster Ave., excepting however from the last named street the construction of drains.

COLUMBUS, OHIO—Bids are asked until noon, Nov. 24, the Board of Public Service of the City of Columbus, for the improvement of 16 streets and the construction of three sewers. E. W. Hirsch, is Secy. of the Board.

Bids were received by the Board of Public Service, recently for the improvement of 15 streets and alleys. In all there were five bidders, most of whom bid for each piece of the work. Geigle, Garnes & Co., bid on 15 at a combined figure of $11,803; John Cantion bid for eight at $5,152; John Hush bid on 14 at $13,199; John C. Beasley bid on 14 at $11,945; the Acme Paving & Construction Co. bid on seven at $9,532. The contracts will be awarded soon and the work will probably be divided between the various bidders.

ELYRIA, OHIO.—The ASPHALT BLOCK PAVING CO., 20 Jessie St., Toledo, is stated to have secured a contract for paving in Elyria; cost, $5,700.

DAYTON, OHIO.—The Bd. Pub. Service on Oct. 26 awarded the contract for paving South Wayne Ave. to DAVIS BEARD at $27,000.

TOLEDO, OHIO.—Bids will be received until Nov. 18 by the Board Public Service for furnishing material and paving with either vitroid block, sheet asphalt, asphalt block or creosoted wood blocks, portions of Fort, Columbus, Buckeye and Leonard Sts. Reynold Volt is Secy.

ST. CLAIRSVILLE, OHIO—Bids are asked by E. E. Shepherd, County Audr., until 1 p. m., Nov. 23, for making all excavations, furnishing all labor and materials necessary to improve by paving with brick, 10,300 feet of the Bellaire and Wegee Pike in Pultney and Mead townships, Belmont County.

FT. BENJAMIN HARRISON (Lawrence post-office) IND.—Bids are asked by Capt. James V. Heidt, Q. M., until Nov. 18, for the construction 960 ft. of gravel road through the grounds of Ohio post.

FOWLER, IND.—We are officially advised by Commissioners of Benton County on Nov. 4, that bids were received for the construction of a stone road 9 ft. wide, 19,480 ft. in length. Estimated cost, $12,500. The contract has been awarded to L. W. ROACHE of Hartford City, Ind., at $11,680. Lemuel Shipman is County Audr.

BRAZIL, IND.—We are officially informed that bids were received by the Board of Commissioners of Clay County until Nov. 2, for the construction of 7,901 ft. of gravel road in Dick Johnson Township. The contract has been let to KEEGAN BROS., of Brazil, at $4,138. Oliver Wilkins is Engr., Brazil; Joseph L. Burns is County Audr.

CROWN POINT, IND.—We are officially advised that bids were received by the Commissioners of Lake County until Nov. 1, for the construction of a gravel road in North Township, known as the Riley Road. The contract has been let to LEVENE BROS., of Hammond, Ind. Charles A. Johnson is County Audr.

CRAWFORDSVILLE, IND.—Bids will soon be asked by the Commissioners of Montgomery County for the construction of a gravel road in Brown Township and two gravel roads in Union Township.

PERU, IND.—The Commissioners of Miami County will soon ask for bids for the construction of a gravel road in Peru Township. Several other petitions are pending.

TIPTON, IND.—Bids will be received by the commissioners of Tipton County until 10 a. m., Dec. 6, for the construction of the following gravel or stone roads: The Hinds gravel road in Madison Township, length of road, 5,278 ft.; the League gravel road in Cicero Township, 2,647 ft. in length; the James Cloud gravel road in Cicero Township, 2,312 ft. in length; the Peter Orr road in Prairie Township, 5,201 ft. in length; the Vawter gravel road in Prairie Township, 5,300 ft. in length; the Bowlsby gravel road in Liberty Township, 5,223 ft. in length; the Spencer gravel road in Jefferson Township, 2,953 ft. in length. J. P. Barlow is County Audr.

PAOLI, IND.—Commissioners of Orange County will receive bids on amended estimates for the construction of a gravel road in Greenfield Township. Former estimates were too low and no bids were received.

GARY, IND.—Bids are asked by the Board of Trustees of the Town of Gary, until 2 p. m., Nov. 16, for the improvement of 18th Ave., from the east line of Broadway to the west line of Georgia St.

MARION, IND.—JOHN W. SULLIVAN was awarded contract by the County Commissioners on Nov. 1, to construct three miles of gravel road in Monroe Township, leading from the Center school house south, the contract price being $8,945. Other bidders were Miles & Oren, $10,927; Nelson & Matthew, $11,848; Claud C. Cole, $10,750; G. A. Mason, $10,700. The petition of C. L. Smith for gravel road in Liberty Township was granted.

WABASH, IND.—Bids are asked until 6 p. m., Nov. 22, by Fremont McLees, City Clerk, for construction of cement sidewalks on both sides of Spring St., from Manchester Ave. to Main St. Will Fowler is City Engr.

NORTH CHICAGO, ILL.—Bids are asked by R. C. Holliday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until Nov. 27, for about 12,000 sq. yds. of macadam paving and 6,700 sq. yds. of concrete sidewalks, with curbing, drains, catch basins, etc., for the U. S. Naval Training Station at North Chicago.

SPRINGFIELD, ILL.—See item under Sewerage.

HOMER, ILL.—HUFFMAN, TOWNSEND & CO. have been awarded contract for paving a portion of First St. at $17,688.

GREENVILLE, ILL.—The contract for paving a portion of College Ave. is reported awarded to REEB BROS., of Belleville, Ill., at $15,662.

BELLEVILLE, ILL.—REEB BROS., of Belleville, have secured the contract for paving portions of Bowman and Exchange Aves. and Seventh St. at $20,286.

KANKAKEE, ILL.—The Board Local Improvements has decided to pave with Sarco a portion of East Court St. Estimated cost, $17,582.

DANVILLE, ILL.—Bids are asked by the Board of Local Improvements until 7 p. m., Nov. 16, for grading, concreting paving with vitrified paving brick with cement filler and asphalt expansion joints, placing of six inlets with sewer pipe connections to main sewer, and the re-setting of curbing on Voorhees St. from the east line of Gilbert St. to the west line of Vermillon St. W. E. Winn is City Engr.

SPRINGFIELD, ILL.—The contract for paving New St. with brick has been awarded to JOHN E. BRETZ, of Springfield, at $1.50 per sq. yd. for paving and 40 cts. per lin. ft. for curb and gutter. John S. Schnepp is Mayor. Bids were received on Nov. 1.

ST. PAUL, MINN.—The Board of Public Works has awarded the contract for paving East Tenth St. with vitrified paving brick to FIELDING & SHEPLEY, 416 University Ave., City, on a bid of $15,378. The Board is taking bids now for macadamizing Kent St. between Marshall and St. Anthony Aves., costing $15,000. L. W. Rundlett, is City Engr.

FORT LEAVENWORTH, KAN.—Bids are asked by Capt. William D. Davis, Q. M., until 11 a. m., Nov. 13, for the construction of roads, walks, etc., to Fort Leavenworth.

LAWRENCE, KAN.—Bids will be received until 5 p. m., Nov. 15 by F. D. Brooks, City Clerk, for furnishing material, grading, curbing on Mississippi and New Jersey Sts., requiring 12,300 sq. yds. brick pavement, etc.

OMAHA, NEB.—Bids are asked until 11 a. m., Nov' 27, by Capt. J. L. Hines, Q. M., for construction of brick pavements, gutters, retaining wall, etc., at Omaha depot.

LINCOLN, NEB.—Bids are asked until 1 p. m., Nov. 15, by Roscoe C. Ozman, City Clerk, for paving District No. 61, being 26th from the north side of J St. to the south side of O St., in the city of Lincoln.

ST. JOSEPH, MO.—The Board Public Works on Oct. 21 awarded the contract for paving a portion of Fifth and Olive Sts. with standstone block to YOUNG BROS., at $3.23 per sq. yd.

AUSTIN, TEX.—The proposed paving will include 4,600 sq. yds. brick and 50,000 sq. yds. of bitulithic. Estimated cost, $118,000. G. S. Iredell is City Engr.

STILLWATER, OKLA.—We are officially advised that the following bids were received by the Mayor and City Council on Nov. 2 for paving about 71,000 sq. yds. of street with asphalt: P. T. Connely & Co., El Reno, Okla., $185,098; J. F. Hill Paving Co., Chicago, Ill., $168,210; M. V. Ryan Const. Co., Buffalo, N. Y., $180,434. The City Council has passed a resolution to award the contract to the J. F. HILL CO., of Chicago. C. A. Hill is City Engr.

OKLAHOMA CITY, OKLA.—Bids are asked by B. Parman, City Clerk, until Nov. 15 for asphalt paving. Probable cost, $70,000. W. C. Burke is City Engr.

EVERETT, WASH.—The Board of Public Works has let the contract for paving 23d St. with asphalt, from Colby to Rucker Ave., to J. B. SNYDER, at $5,749.

REDLANDS, CAL.—F. J. Culver, Mgr., of the Forest Home resort, has completed plans for building a road from Redlands to the resort in Mill Creek Canyon. The cost will total $12,000.

CADWELL, IDAHO.—The WARREN CONSTRUCTION CO., has been awarded a contract for paving 22 blocks of street in Cadwell for a bid of $125,784.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

MILLBRIDGE, ME.—Jasper Wyman, of Millbridge, and A. E. Farmsworth of Brooklin, will build two sardine factories at once one to be located, probably, at West Tremont on Bluehill Bay, the other further west. Pulpit Harbor, at North Haven, and Camden being among the places under consideration. Each factory will have a capacity of 50,000 to 60,000 cases of sardines annually. It is expected that the factories of the Farnsworth Packing Co. at Brooklin and Jasper Wyman & Son at Millbridge will be merged in the new concern. The concern has contracted for four boats and is making arrangements for machinery and other equipment for the two new factories, which are to be ready for operation on the season of 1910.

MANCHESTER, N. H.—The Leighton Machine Co. is to erect a factory building on the Portsmouth railroad in East Manchester and will move the works there from the building now occupied on Canal St., as soon as the new factory can be completed. The factory will be a substantial structure of brick and stone, 250 × 40 ft., ground dimensions and two stories in height. It will be erected something in the form of a letter U. The Leighton plant includes the former Dodge Needle Works.

NEW BEDFORD, MASS.—Plans have been drawn and work will begin at once on the construction of the plant for the Apponegansett Co., to be located on Clark Point. The charter gives the corporation the right to buy and sell cotton, wool, silk, yarns and other materials of a fibrous nature in either a finished or unfinished state. Capital, $500,000.

LOWELL, MASS.—Two permits to build have been obtained by the Merrimack Mfg. Co. One is for the addition of two stories to the one-story fustian dyehouse, 88 × 120 ft., at an estimated cost of $25,000. The second is for a building adjoining the dyehouse, 147 × 165 ft., three stories high and of brick material, at an estimated cost of $50,000. To build this structure the old box shop and one or two other old structures will have to be torn down.

C. P. Hall of Boston, Vice-President of the American Hide & Leather Co., met with the Board of Health recently and made application for a permit to build a beaming plant that will cost $148,000 at the upper end of Perry St. A map submitted showed that the proposed building would be at the southerly end of Perry St. on land owned by the American Hide & Leather Co., off the St. between 200 and 300 ft. F. A. Bates is Agent, Lowell Bd. of Health.

NEW BRITAIN, CONN.—The Russel & Erwin Mfg. Co. plans to erect an addition to its plant. A 7-story brick factory, 60 × 100 ft., will be erected. The main part of it will be used for manufacturing purposes, although the second story will be employed as an addition to the company's office.

The New Britain Machine Co. has begun the erection of an additional factory, which will be four stories high, of brick, 26 × 87 ft.

The Vulcan Iron Works Co. has acqdired a track of land adjacent to its plant and will put up an additional foundry building of brick.

NIAGARA FALLS, N. Y.—The TURNER CONSTRUCTION CO., 11 Broadway, New York, has secured the contract to build a pulp mill for the Defiance Paper Co., Niagara Falls, N. Y. It will be of reinforced concrete, 264 ft. × 77 ft., 1 story high. Work is to be started at once.

The William A. Rogers Co., Ltd., 460 Main St., is having plans prepared for an addition to its plant at Main St. and the Hydraulic Canal. No details have as yet been announced.

NIAGARA FALLS, N. Y.—The H. R. McNeil Co., H. R. McNeil, Pres., 102 Chandler St., Buffalo, N. Y., will build a plant for the manufacture of stave jointing machinery and general cooperage stock on lands of the Niagara Falls Power Co. Plans are being prepared.

WAVERLY, N. Y.—It is announced that ground will be broken for a silk mill and work will be rushed as rapidly as possible. S. W. Smith & Sons who conduct a mill in Patterson, N. J., will be the owners of the new mill.

SAUGERTIES, N. Y.—Contracts for the erection of a 3-story brick addition to the plant of the Martine-Cantine Co. have been let to GEORGE MCNALLY and WILLIAM MULLEN, of Saugerties.

SYRACUSE, N. Y.—The Brennan Motor & Mfg. Co., has commissioned Charles D. Wilsey, Nottingham Bldg., Syracuse, to prepare plans for a building in connection with its present plant, No. 101 Grape St. Bids will be received at once, and it is proposed to break ground without delay in order that the building may be ready for occupancy by January.

GLOVERSVILLE, N. Y.—Bachner-Moses-Louis, of Gloversville, have completed plans for the erection of a 4-story addition to their plant. Work will be commenced as soon as possible.

NEW YORK, N. Y.—The contract has been let to the TURNER CONSTRUCTION CO., 11 Broadway, New York, to construct a boiler-house and coal bins for J. B. King & Co., West New Brighton, S. I. Reinforced concrete will be used. The building will be 130 ft. long, 42 ft. wide, 40 ft. high, and two stories high. Work will be started at once.

James Riely Gordon, Arch., 402 Fifth Ave., has prepared plans for a 4-story addition, 175 × 49 ft., to the factory at Marks and Grand avs, Brooklyn, for the Knox Hat Mfg. Co.

Sundell Hyman, 2069 Fifth Ave., New York, owner, is taking bids on a 7-story mill construction brick and limestone factory, with stores, 95 × 139 ft., to be erected at the southeast corner of Metropolitan and Bushwick Ave., Brooklyn, to cost about $50,000. A. Vollweiler, 606 Bushwick Ave., Brooklyn, is Arch.

UTICA, N. Y.—The Kendall Knitting Co., Third and Catherine Sts., is to erect a plant at the corner of Broad and Second Sts., the site of which is being cleared. The plant will be constructed by GEORGE SHIPPY and HENRY KASSING. It will have four stories and a basement and will be 154 × 54 ft.

BUFFALO, N. Y.—We are officially advised that the John R. Keim Mills, Inc., will enlarge its plant at Kensington Ave. and Erie R. R., by erection of a steel frame quadrangular building, 20 × 68, 20 × 58 and 22 × 58 ft. There will be an extension to the press shop, installation of two or three long stroke presses for deep drawing work, some Bliss drop hammers, also wash rooms for workmen, etc. John R. Lee is Pres.; W. H. Smith, Gen. Mgr.

The Lackawanna Bridge Co. of Buffalo was incorporated on Oct. 29, under the laws of Illinois with a capital stock of $1,200,000. About $200,000 of this is held by Illinois capitalists. The greater part of the stock has been subscribed by New York and Ohio men. Ralph A. Kellogg, of Johnson's Park, an attorney, is the only Buffalo stockholder. Several months ago, through the agency of Parke, Hall & Co., according to the Buffalo "Express," the company bought 20 acres of land owned by John Kelderhouse in South Buffalo on a spur to the Lackawanna steel plant, near the Lehigh Valley coal docks. Ground was broken a few weeks ago for a structural-steel plant. Two buildings will be erected this year; two next year, and two more in the third year. When in full operation employment will be given 1,000 men. The new bridge company is under contract to use all such raw material as the Lackawanna Steel plant can furnish for its uses. The new company is not in any way connected with the steel plant, however. An office will be maintained here and another in Chicago, Ill.

The Fillmore Ave. Foundry & Iron Works, Lyman P. Hubbell, Prest., 153 Fillmore Ave., is arranging to build an addition to its plant at Fillmore Ave. and the Pennsylvania R. R.

BUFFALO, N. Y.—We are officially advised that the Rice & Adams Dairy Machinery Co., 176 Chandler St., will add one story to its concrete block fireproof factory building, 50 × 150 ft., at Chandler St. and New York Central R. R. Belt Line. The company will require immediately a producer gas plant, metal working machinery and a radial drill. A. E. White, Buffalo, is Arch.

The Beaver Mfg. Company, William F. Mac Glashan, Prest., 229 Perry St., will erect a factory building 50 × 200 ft., one story high, of reinforced concrete, at Military Road and New York Central R. R. Estimated cost, $35,000.

A contract has been let to the TURNER CONSTRUCTION CO., 11 Broadway, New York, for extensions to the north and south wings of the body building of the Pierce-Arrow Motor Car Co., Buffalo, N. Y. One building will be 425 × 60 ft., four stories high; the other building, 350 × 60 ft., four stories. They will be built of reinforced concrete. Work to be started at once. Lockwood, Greene & Co., 93 Federal St., Boston, Mass., are Archs and Engrs.

Lojacona & Weigand, 56 Mechanic St., have let contract to JOHN A. LENZ, 1004 Humboldt Parkway, for erection of a 5-story and basement factory building on Wilkeson St., 37 × 100 ft., of brick and steel, to cost $16,000. Emil C. Paul, 808 Main St. is Arch.

Plans have been completed for the erection of a 2-story addition to the present plant of the E. B. Holmes Machinery Co., on Michigan St. Cost, $5,000.

CARTERET, N. J.—J. F. Pierce, Eastern Mgr., for Armour & Co., 109 Duane St., New York, has announced that the company had taken title to 17.2 acres of land at Tuft's Point, Carteret, N. J., on which would be erected a plant for the manufacture of lard. The land fronts on Staten Island Sound, and near it are the tracks of the Central Railroad of New Jersey. Construction probably will commence at the first of the year.

HACKENSACK, N. J.—The Erie R. R. Co. 50 Church St., New York, will erect shops to cost $50,000 on the Hackensack meadows. The structure will be constructed of brick and concrete. It will include a machine shop, blacksmith shop, round-house and power-house, it is stated. F. L. Stuart is Ch. Engr.; F. B. Howard is Engr. Bridges and Bldgs.

NEWARK, N. J.—Estimates are being received by Frederick A. Phelps, Arch., 13 Clinton St., for a manufacturing plant for the Wayne Co., at 342 Central Ave. The structure will involve an expenditure of $50,000, will be of brick, four stories high. The main building will cover an area of 60 × 150 ft., with two wings, about 50 × 60 ft. It will be of mill construction, with steam-power plant, freight elevators and modern factory facilities. It is expected that work will be started next month and completed early in the spring.

BETHLEHEM, PA.—An issue of $7,500,000 of notes was authorized by the stockholders of the Bethlehem Steel Corporation at a meeting in Newark on Nov. 5. The issue is for five years, bears interest at 6%, and is dated Nov. 1, 1909. The corporation deposits as collateral one-half of the capital stock of the Jarague Iron Co., one of its subsidiary companies. The stockholders authorized the guarantee of that company of the principal, interest, and sinking fund of the notes. Part of the proceeds of the sale will be used to retire the outstanding $2,500,000 Bethlehem Steel Corporation coupon notes. The remainder will be used for doubling the capacity of the present rolling mills at Bethlehem, for the erection of the necessary blast furnaces to supply them, and for the developing of the corporation's ore properties in Cuba to supply the additional ore necessary for the increased Bethlehem mills.

PHILADELPHIA, PA.—The Model Mills Company, to which a charter of incorporation was recently granted, with a capital of $150,000, proposes to erect a factory. The incorporators of the company are, Thomas Boggs, Samuel R. Boggs and George W. Boggs. The factory will consist of a 5-story, reinforced concrete building, 285 × 70 ft., and a boiler house, one story, of reinforced concrete, 92 × 35 ft. This company will manufacture Wilton and body Brussels rugs at the Model Carpet Mills, at Second St. and Allegheny Ave. where the same in-

terests manufacture ingrain carpets under the name of Thomas Boggs & Sons, Inc.

As a site for a lithographing plant it intends erecting the Jarden Lithographic Co. has bought the properties 310 to 316 North Eleventh St., 71.3 × 72 ft., extending from Pearl to Wood Sts. A permit to demolish the old buildings on the site has been issued to Irwin & Leighton.

EDWARD FAY & SON, 2966 Richmond St., Philadelphia, have a contract to build a 3-story factory for Moses Bear, on the lot now occupied by 245 South Sixth St. Cost, $15,000.

WILMINGTON, DEL.—The plans for the proposed car shops for the Harlan & Hollingsworth Corporation have been submitted to the Building Inspector, who has been asked to issue a permit, which he expects to do at once. The building, it is stated, will cost about $85,000.

BALTIMORE, MD.—William Friehofer, of the Vienna Baking Co., has made application at the Building Inspector's office to build an addition to the company's plant at the southeast corner of Stockholm and Howard Sts. The improvements will cost about $6,000. Plans were made by John Freund, Jr., Arch., 210 East Lexington St., and call for a 1-story brick building 60 × 93 ft. Large ovens will be installed, and the building will be covered with a slag roof. The contract has been awarded to JOHN F. KUNKEL.

CONCORD, N. C.—The Magnolia Mills Co., of Concord, N. C., has decided to build a 56 × 75 ft. addition to provide more space for present machinery.

BESSEMER CITY, N. C.—The Slater Mfg. Co. of Bessemer City, N. C., has changed its title to the Osage Mfg. Co., and will add considerable new weaving equipment. It has awarded the contract to the WHITTED & WHITE CO., of Charlotte, N. C., for the machinery, which will include 400 looms and accompanying apparatus.

SAVANNAH, GA.—The Southern Fertilizer & Chemical Co. has closed a contract for the erection of a modern fertilizer plant on the Hutchinson's Island terminal of the Seaboard Air Line railway. The land has been leased for the buildings and the contract let for their construction to the PRATT ENGINEERING & MACHINE CO., of Atlanta, Ga. Work is to begin in a short time, and it is anticipated that the plant will be ready for operation by Feb. 1, 1910. The cost of the factory is to be $50,000. The new plant will have a capacity of from 30,000 to 35,000 tons of fertilizer each season. A. D. Strobhar, is Secy., Treas. and Gen. Mgr. of the Southern Fertilizer & Chemical Co.

NASHVILLE, TENN.—The May Hosiery Mill of Nashville, Tenn., has completed all arrangements for its plant. It is erecting a main building, 60 × 225 ft., two stories, a dye-house, 55 × 125 ft., one story, and several other buildings covering a space 50 × 100 ft. When these structures are complete, the company will install an equipment of 300 knitting machines, etc., for a daily production of 1,000 dozen pairs of hose, with 300 persons employed. The company expects to complete the mill by the first of next year. It is capitalized at $60,000, and has the following officers: Jacob May, Pres., Julius W. Martin, Secy.-Treas. Noted last week.

SOUTH BEND, IND.—C. E. Stevens and J. H. Loughman have ordered plans for the erection of a manufacturing plant.

COLUMBIA CITY, IND.—The Trepert Auto Gasoline Engine Co., of Rochester, N. Y., will ask for bids soon for the erection of a factory in this city and when it is completed will remove its plant here.

BAY CITY, MICH.—If an appropriation of $30,000 is granted by the directors, the Michigan Central will establish car building shops in Bay City, Mich., and employ about 225 men. This place is a division headquarters with 30 daily passenger trains. The improvement would relieve the Jackson shops of some of the work they do.

GREEN BAY, WIS.—Announcement is made that the Green Bay Paper & Fibre Co. will build an addition to its paper mill, add a paper machine and double its capacity of 30 tons per day. Cost, $150,000.

LAWTON, OKLA.—It is stated that the E. L. Shuford Mfg. Co., of Lawton, Okla., will be organized by Brown Cornelison, of Lawton, and E. L. Shuford of Hickory, N. C., with a capital of $500,000, to construct a 10,000-spindle and 340-loom mill for manufacturing cloth. Various improvements will be undertaken, including the construction of water and sewer systems, the erection of an electric lighting plant, the construction of streets and pavements and the erection of operatives' cottages. It is reported that this company is a continuation of the plan referred to some weeks ago, when Chicago and Lawton parties were named as organizing two big cotton mill companies to manufacture cloth and lace.

PORTLAND, ORE.—The Pacific Car & Foundry Co. has purchased a site 500 × 1,800 ft., located between the Oregon Slough and Smiths lake, west of the Swift packing plant, upon which it will erect a $80,000 car manufacturing plant. The plant will be started at once and will employ 300 and 400 men in the construction of steel cars and in car repairs. The plant is to be completed by March 10. A locomotive plant will be installed later.

The Davis Safe & Lock Co. has closed negotiations with Swift & Co., for about five acres of land, in Kenton on the peninsula, extending from the Columbia Boulevard to the Oregon Slough and being 200 × 1,200 ft., and upon which it will erect a main factory building 100 × 300 ft. Part of this building will be two stories in height and will be built of concrete and made fireproof; also an iron and brass foundry building, and a coke and sand shed. The plant will be completed and in operation by March 1, 1910. The plans are being prepared by the company's architect.

MISCELLANEOUS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

(* *denotes that this work is advertised in Engineering News.*)

RETAINING WALL.—Omaha, Neb.—See item under Streets and Roads.

PARKS, ETC.—Pittsburg, Pa.—See item under Water Supply—Irrigation.

GRANITE STEPS.—New York, N. Y.—Bids are asked until 3 p. m., Nov. 18, by the Department of Parks for furnishing and constructing granite steps at several places.

TOWBOAT.—Little Rock, Ark.—Bids are asked until 11 a. m., Dec. 1, by Maj. M. L. Walker, Corps Engrs., U. S. A., for furnishing and delivering one stern-wheel steam towboat.

DITCH.—Connersville, Ind.—Bids were received by Karl L. Hanson, Drainage Comr., on Oct. 28, for construction of a tile ditch. Contract was awarded to S. R. HUDELSON at $1,460.

DRIP PANS.—New York, N. Y.—Bids are asked by the Department of Bridges until 2 p. m., Nov. 18, for construction of drip pans under the Manhattan approach of the Williamsburg bridge.

HOOK AND LADDER TRUCKS.—New York, N. Y.—Bids are asked until 10.30 a. m., Nov. 19, by the Fire Department for furnishing and delivering five 65-ft. aerial hook and ladder trucks.

DOCK.—Escanaba, Mich.—The contract for rebuilding the Chicago & Northwestern Ry. Co.'s dock No. 5, has been awarded to M. J. PEPPARD, of Minneapolis, Minn. The total cost of this dock will be about $1,000,000.

JETTY WORK.—Dallas, Tex.—Bids are asked by Capt. A. E. Waldron, Corps Engrs., U. S. A., Dallas, until Nov. 27, for jetty work at Sabine Pass, Tex. Specifications are on file at office of Engineering News, New York.

LEVEE.—New Orleans, La.—Contract to construct the Highland Levee, on the Mississippi River, Parish of West Baton Rouge, La., was awarded by the Atchafalaya Basin Levee District to GIBSON & LINNAN, of Natchez, Miss., at 16.49 cts. per cu. yd.

DITCHES, LEVEES.—Auburn, Neb.—Bids will be received until Nov. 15 by the Nemaha Valley Drainage District No. 2 for constructing ditches, levees and other works of improvement, requiring the removal of about 2,250,000 cu. yds. of earth. Sylvester Reed, Secy.

DREDGING.—New York, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Nov. 24, for dredging Wallabout Canal, from Hewes St. to a point about 400 ft. northerly. The Engineer's estimate of the quantity is as follows: 6,000 cu. yds. scow measurement.

*IRON FENCE AND STAIRS.—Boston, Mass.—Bids are asked until 2.30 p. m., Nov. 22, by the Charles River Basin Commission, 367 Boylston St., Boston, for erecting a c.-i. fence and two flights of iron stairs on the Charles River Dam in Cambridge and Boston, Mass. Hiram A. Miller is Ch. Engr.

REPAIRING FERRYBOAT.—New York, N. Y.—The Board of Estimate and Apportionment has appropriated $46,000 with which to repair the old ferryboat Castleton, for use on the municipal line to Bay Ridge. The Castleton cost the city $125,000, and the proposed repairs will make it cost $171,000.

BULKHEADS, ETC.—Geneva, Neb.—Contract for constructing 6,600 ft. of open ditch and 1,900 ft. 36-in. reinforced-concrete pipe and four concrete bulkheads has been awarded to N. N. IRWIN, of Shenandoah, Iowa, for $7,200. Grant & Letton, of Lincoln, Neb., are Engrs. Bids were received on Oct. 25.

DRAINAGE DITCH.—Kansas, Ill.—Bids were received by the Drainage Commissioners of District No. 2, on Oct. 30, for constructing a drainage ditch in this district. J. T. Laughead is Clk. Comrs. George V. Dole is Engr., Paris, Ill. Contract was awarded to the NATIONAL DRAIN TILE CO., at $9,261; and $7 per cu. yd. for headwall, additional.

LEVEE, DITCHES.—Rushville, Ill.—Bids were opened Oct. 19 by the Commissioners of the Crane Creek Levee and Drainage District, for constructing levees, Sections A, B and C, and ditches No. 1 to No. 8. The contract has been awarded to A. V. WILLS & SONS, of Pittsfield, Ill., at 10 cts. per cu. yd.; total cost, $82,844. Chas. W. Brown, of Jacksonville, is Engr.

TILE DITCH.—Hastings, Ill.—Bids were received on Oct. 25, by the Commissioners of Little Vermilion Special Drainage District at office of Ray & Dobbins, Attys., Champaign, Ill., for furnishing, hauling, and for laying tile for ditch in this district at Hastings, Ill. Contract was let to ARTHUR BIRT, Decatur, Ill., at $3,420 who will get tile from Wm. E. Dee Clay Mfg. Co., Mecca, Ind.

FOUNDATION, DOCKS, ETC.—Buffalo, N. Y.—Bids were received on Nov. 1 by Francis G. Ward, Comr. Dept. Pub. Works, for constructing concrete docks, foundation for yacht club house, moving club house to new foundation near the foot of Porter Ave. and for constructing a swimming basin at the foot of Jersey St. Lowest bidder was A. F. CHAPMAN & CO., 20 Breckenridge St., Buffalo, who probably will be awarded the contract. Estimated cost, $39,000.

FIRE ENGINES.—New York, N. Y.—Bids were received as follows by the Fire Department on Nov. 5 for furnishing and delivering (a) two second-size steam fire engines and (b) two fourth-size steam fire engines: NOTT FIRE ENGINE CO., 50 West Broadway, (a) $5,272 each, (b) $4,474 each (awarded contract); Combination Ladder Co., 32 Park Place, (a) $11,189 for two, (b) $9,749 for two; American La France Fire Engine Co., 149 Broadway, (a) $6,272 each, (b) $5,474 each.

ROCK-CRUSHING PLANT.—Los Angeles, Cal.—Bids were received on Oct. 18 by the Board County Supervisors for furnishing and erecting complete a rock-crushing plant, including sizing machinery and storage bins, with a guaranteed capacity of 500 tons per 8-hour day under average conditions, to be located near the station of Pasadena, on the Southern Pacific R. R. C. G. Keyes, County Clk. Contract was awarded to HENSHAW, ZULKLEY & CO., 219 Spear St., San Francisco, Cal., at $25,500.

BARGE CANAL.—Albany, N. Y.—Bids are asked by F. C. Stevens, Supt. Public Works, until noon, Dec. 1, for Contract No. 2-E, Barge Canal, located at Waterford, N. Y., which is for completing the construction of the canal from the Mohawk River at Waterford to a point about one-fourth mile above the head of Lock No. 3. Engineer's estimate is $263,189. The work was advertised previously, but the only bid, that of the Ferguson Contracting Co., of New York, submitted on Oct. 5, was rejected.

DRY DOCK.—New York, N. Y.—The Bureau of Yards and Docks, Navy Dept., Washington, has awarded contract for the completion of Dry Dock No. 4, at the New York Navy Yard, to the lowest bidder, HOLBROOK, CABOT & ROLLINS CORPORATION, 6 Beacon St., Boston, Mass., at a price to be equal to the actual cost of the work increased by 10%. If the Department, however, so desires they may, on 60 days' notice, accept the bid of these contractors to complete the work for the lump sum of $1,389,000. A full list of bids was given last week.

SEAWALL AND DREDGING.—Norfolk, Va.—Bids were received as follows on Nov. 6 by the Bureau of Yards and Docks, Navy Dept., Washington, for the construction of a seawall and for dredging at the Navy Yard, Norfolk, Va.: Sanford & Brooks Co., 24 Commerce St., Baltimore, Md., Item 1, $23,150; item 2, $214; Alsop & Peirce, First National Bank Bldg., Newport News, Va., $19,000, $223; Raymond Concrete Pile Co., 140 Cedar St., New York, $41,000, $348; William L. Miller, 19 Milk St., Boston, Mass., $25,900, $269.

DRAINAGE.—Chewelah, Wash.—Bids were received as follows on Oct. 18 by S. M. Brown, Chn. Comrs. Drainage District No. 3, for constructing 17 miles of drainage system, involving 410,000 cu. yds. of excavation; (a) earth excavation, per cu. yd.; (b) rock excavation, per cu. yd.: T. J. Saylor & Co., Lamar, Colo., (a) 11.75 cts., (b) 90 cts.; Fred R. Hupp, (a) 15.25 cts., (b) 90 cts.; Callahan Bros., Dillon, Mont., (a) 15.45 cts.; G. A. McWilliams, Walnut, Ill., (a) 10.50 cts., (b) cost plus 10%; Peter Morrison, Spokane, (a) 14 cts., (b) $1.30; Daniel Weage, Coldwater, Mich., (a) 7 cts., (b) 90 cts., and hardpan, 13.17 cts. Eslick & Hartwick, Spokane, submitted a lump sum bid of $61,000.

SUBWAY.—Brooklyn, N. Y.—The Public Service Commission on Nov. 9 signed the contracts, as follows, for construction of the Fourth Ave. subway: Section 1—Nassau St. to Willoughby St., to JAMES P. GRAHAM, Bensonhurst, L. I.—Railroad, $1,020,476; pipe galleries, $101,374.

Section 2—Willoughby St. to Ashland Pl., to WM. BRADLEY, 1 Madison Ave., New York.—Railroad, $3,436,019; pipe galleries, $58,695.

Section 3—Ashland Pl. to Sackett St., WILLIAM BRADLEY, New York.—Railroad, $3,392,091; pipe galleries, $208,135.

Section 4—Sackett St. to Tenth St., E. E. SMITH CONTRACTING CO., Arcade Bldg., Philadelphia.—Railroad, $2,283,553; pipe galleries, $206,672.

Section 5—Tenth St. to 27th St., to the TIDE-WATER BUILDING CO., 1499 Broadway, New York, and T. B. BRYSON, 165 Broadway, New York.—Railroad, $1,945,640; pipe galleries, $251,076.

Section 6—27th St. to 43d St., to E. E. SMITH CONTRACTING CO., Philadelphia.—Railroad, $2,808,982; pipe galleries, $173,665.

LEVEES.—New Orleans, La.—Bids were received on Oct. 28 by the Board of State Engineers, G. W. Lawes, Secy., Cotton Exchange, for the construction of various levees. Contracts have been awarded for the work as follows: (Mississippi River unless otherwise noted). DONOVAN & DALY, Lake Providence, La., Upper Green levee, Concordia Parish, 285,000 cu. yds., at 22.4 cts. per cu. yd. M. L. LINMAN, Geismar, La., Southport levee, Jefferson Parish, 60,000 cu. yds. at 29.97 cts., and Sims levee, Ascension Parish, 12,000 cu. yds. at 24.9 cts. LUCIEN CARO, Bertrandville, La., Stella levee, Plaquemines Parish, 25,000 cu. yds. at 17.5 cts. W. HENRITZY, Nestor, La., Felix Hingle levee, Plaquemines Parish, 4,200 cu. yds. at 19.5 cts. and 450 lin. ft. revetment at $1.27 per lin. ft.; also New Canal levee, Plaquemines Parish, 7,000 cu. yds., at 13.78 cts. J. L. BURNS, Buras, La., Lee Rice-to-Clinton levee, Plaquemines Parish, 15,000 cu. yds., at 17 cts. and 2,100 lin. ft. revetment at $1.24¾ per lin. ft.; also the Pelas-Buras Church levee, Plaquemines Parish, 10,500 cu. yds., at 16.95 cts., and 1,400 lin. ft. revetment at $1.26; also the Baptiste Collette Gap levee, Plaquemines Parish, 7,000 cu. yds. at 35 cts. M. BETTERY, Marksville, La., Coco Point levee, Avoyelles Parish (Red River), 30,000 cu. yds., at 14.9 cts. MADLOW & HODGE, Natchez, Miss., Sycamore levee, Concordia Parish, 100,000 cu. yds., at 15.45 cts. H. F. GARBISH, Vicksburg, Miss., Point Lookout Spur, East Carroll Parish, 20,000 cu. yds., at 23.75 cts.; also Hard Times Spur, Tensas Parish, 25,000 cu. yds., at 24.40 cts. DALE ELLIS, Darrow, La., Darrowville levee, Ascension Parish, 40,000 cu. yds., at 14.75 cts.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 172.

SEWER CONSTRUCTION.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
Incorporated.

Sealed proposals for the construction of the Jefferson Street Sewer, Contract No. 57, will be received at the office of the Commissioners of Sewerage, 605 Equitable Building, Louisville, Ky., until 12 o'clock noon, November 29th, 1909.

The work consists mainly of the construction of about 1,643 feet of sewer, including 1,643 feet of earth excavation from 7 to 14 ft. deep, about 95 cu. yds. of concrete, about 471 feet of 22" vitrified pipe and about 684 feet of 18" vitrified pipe.

Plans and specifications may be seen at the office of the Commissioners, and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposal for Jefferson Street Sewer," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond" as described in the form of proposal.

P. L. ATHERTON, Chairman.
CHAS. P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

IRON FENCE AND STAIRS AT THE CHARLES RIVER DAM.

COMMONWEALTH OF MASSACHUSETTS.
CHARLES RIVER BASIN COMMISSION.

Sealed proposals will be received at the office of the Charles River Basin Commission, 367 Boylston Street, Boston, Mass., until 2.30 o'clock P. M., of Monday, November 22, 1909, for furnishing and erecting a cast-iron fence and two flights of iron stairs on the Charles River Dam in Cambridge and Boston, Mass. About 1,350 linear feet of fence will be required besides the stairways and the total weight will be approximately 100 tons. Pamphlets containg further information for bidders, forms of proposal, contract and specifications will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 367 Boylston Street, Boston, where also plans may be seen. The printed form must be used in making proposals. The Commission reserves the right to reject any or all proposals and to accept the proposal deemed best for the Commonwealth. HENRY D. YERXA, Chairman, JOSHUA B. HOLDEN, EDGAR R. CHAMPLIN, Charles River Basin Commission; HIRAM A. MILLER, Chief Engineer; WILLIAM S. YOUNGMAN, Secretary.

PUMPS.

Hull, Que.

Sealed proposals will be received up to 4 P. M. on Monday, 6th December, 1909, addressed to John F. Boult, City Clerk, Hull, Que., and endorsed "TENDERS FOR PUMPS" for the construction and erection of one set of Duplex or Triplex Power Pumps, capacity six million U. S. gallons per day, likewise Turbine wheels for operation of same.

Plans and Specifications may be seen at the office of

R. W. FARLEY, City Engineer.

Nov. 8, 1909.

BOOKS

We can save you money and render valuable assistance in the selection and purchase of books. Send for Special Circular EJ. Of interest to all engineers.

The Engineering News Book Dept.
220 BROADWAY, NEW YORK

Suppleme

CONSTRUCTIO
Plans and
List of Con
Railways
Electric Ra
Light and
Bridges
Buildings
Water Supp
Sewerage
Garbage Di
Streets and
Manufactur
Miscellaneo
U. S. Pos
Contract P
EXAMINATIO
INDUSTRIAL
TRADE PUBL
PROPOSALS

CONST

Plans an

(* denotes t

The follow
tions (S.) a
unless other
Engineering
Broadway, N
Bids
close.
11-20 Dredgi
11-20 Genera
11-27 Pneum
S. C.
11-27 Seawal
11-27 Roads,
11-27 Jetty
12- 1*Heatin
land
12- 4 Storag
12-14 Pump-
12-18 R. R.
forni
1-17*Irriga
1-18 Dry-d

List

LIGHT,

11-20 Gene
11-22 Heat
Okla
11-22 Light
11-23 St. l
11-25 Elec
Dak
11-26 Ligh
Iow
11-29 Ligh
12- 1 Heat
12- 1 Elec
12- 1 Boile
12- 6*Pum
12-16 Equi
12-18 Pow

11-19 Brid
11-20 Rep
11-22 Brid
11-22*Brid
11-29 Brid
11-29 Brid
11-30 Brid
11-30 Sub
12- 2 Brid
12- 6 Brid
12- 6*Brid
12- 6*Brid
12- 9 Bri

11-19 Cou
11-20 Pla
11-20*Qua
11-20 Pla
11-22 Pos
11-22*Ho
11-22 Plu
11-22 Sch
11-23 Fi
11-23 Lu
11-23 He
11-24 He
11-24 Ho
11-24 Po
11-24 Ba
(
11-24 Bu
11-26 Bu
11-26 H
11-29 Sc
11-30 R
12- 1*H
l
12- 1*C
12- 1 B
12- 2 P
12- 4 S
12- 6 P
12- 6*Q
12- 6*Q
12- 6 W
12- 9 P
12-10*Q
12-15*P
12-20 H
12-20*V
12-28*P